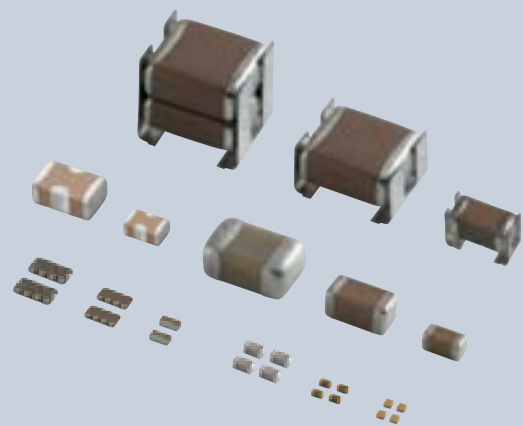




# THE DATASHEET OF GRM1555C1H180JZ01D

# Chip Monolithic Ceramic Capacitors



2016

### **EU RoHS Compliant**

- All the products in this catalog comply with EU RoHS.
- EU RoHS is "the European Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment."
- For more details, please refer to our website 'Murata's Approach for EU RoHS' (<http://www.murata.com/en-eu/support/compliance/rohs>).

### **Qualified Standards**

- The products listed here have been produced by ISO 9001 certified factory.

#### **<Plant>**

- Fukui Murata Mfg. Co., Ltd.
- Izumo Murata Mfg. Co., Ltd.
- Murata Electronics Singapore (Pte.) Ltd.
- Wuxi Murata Electronics Co., Ltd.
- PHILIPPINE MANUFACTURING CO. OF MURATA, INC.

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Product specifications are as of August 2016.

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# Explanation of Symbols in This Catalog

WEB

Links are provided to the latest information from the PDF version of the catalog, which is available on the web.

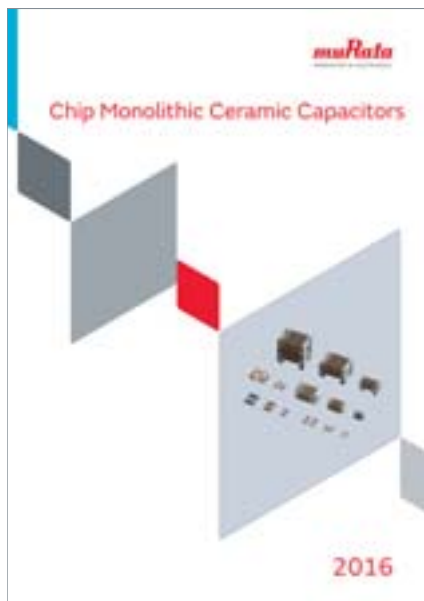
|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General</b>          | For applications that do not require a particular reliability. such as general equipment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Effective Cap</b>                                                            | No DC bias characteristics<br>Polymer capacitor is no capacitance change with DC bias due to aluminum oxidized film for dielectric.                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Infotainment</b>     | Infotainment for Automotive<br>The product for entertainment equipment like car navigations, car audios, and body control equipment like wipers, power windows.                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>EMI FIL®</b>                                                                 | Low-inductance product suitable for noise suppression.<br>This product has extremely low ESL and is suitable for suppression of noise, including high frequencies.<br>This product can also be used as a low-ESL, high-performance bypass capacitor.                                                                                                                                                                                                                                                             |
| <b>Powertrain</b>       | Powertrain/Safety for Automotive<br>Products use for applications (running, turning, stopping, and safety devices) that particularly concern human life, such as in devices for automotive.                                                                                                                                                                                                                                                                                                                                                                                      | <b>Bonding</b>                                                                  | Product for bonding<br>Since gold is used for the external electrodes, the capacitor can be mounted by die bonding/wire bonding.                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Medical Device</b>   | Medical-grade products for Implanted Medical Devices<br>These products are intended for use in implanted medical devices such as cardiac pacemakers, cochlear implants, insulin pumps, and gastric electrostimulators. They are suitable for use in non-critical circuits.*1<br>*1 Non-critical circuits<br>This term refers to circuits in implanted medical devices that are not directly linked to life support, i.e. circuits that will not directly endanger the life of the patient should the functionality of the device be reduced or halted by failure of the circuit. | <b>D1</b><br>Derating 1                                                         | <b>Derating 1</b><br>This product is suitable when a voltage continuously applied to a capacitor in an operating circuit, is used below (derated) the rated voltage of the capacitor. This model guarantees the test conditions in the endurance test, at a rated voltage x 100% at the maximum operating temperature. A reliability assurance level equivalent to a common product can be secured, by using this product within the voltage and temperature derated conditions recommended in the figure below. |
| <b>AEC-Q200</b>         | AEC-Q200 compliant product                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <p>Recommended Conditions of the Derating Operating Voltage and Temperature</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Safety standard</b>  | Safety Standard Certified Product<br>Products that acquired safety standard certification IEC60384-14 and products based on the Electrical Appliance and Material Safety Law of Japan.                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>High Q</b>           | Low dissipation for high frequency<br>By devising ceramic materials and electrode materials, low dissipation is achieved in frequency bands of VHF, UHF, and microwave or beyond.                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Low ESL</b>          | Low inductance<br>This capacitor is designed so that the parasitic inductance component (ESL) that the capacitor has on the high frequency side becomes lower.                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Fail safe</b>        | Fail safe product<br>This capacitor is designed to prevent failures as much as possible by short mode.                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>D2</b><br>Derating 2                                                         | <b>Derating 2</b><br>When the product temperature exceeds 105°C, please use this product within the voltage and temperature derated conditions in the figure below.                                                                                                                                                                                                                                                                                                                                              |
| <b>Deflecting crack</b> | Product resistant to deflection cracking<br>This capacitor is designed to prevent failures as much as possible by short mode caused by cracking when there is board deflection.                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Soldering crack</b>  | Product with solder cracking suppression<br>This capacitor is configured with metal terminals and leads connected to the chip. The metal terminals and leads relieve the stress from expansion and contraction of the solder, to suppress solder cracking.                                                                                                                                                                                                                                                                                                                       |                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Anti-noise</b>       | Product suitable for acoustic noise reduction and low distortion<br>This product suppresses acoustic noise, which occurs when a ceramic capacitor is used, by devising the materials and configuration.                                                                                                                                                                                                                                                                                                                                                                          | <b>D3</b><br>Derating 3                                                         | <b>Derating 3</b><br>Please apply the derating curve according to the operating temperature.<br>Please refer to detailed specifications sheet for details.                                                                                                                                                                                                                                                                                                                                                       |

# Selection Guide for Capacitors

|                |      |      | AEC-Q200 | Safety standard | High Q | Low ESL | Anti-noise | Fail safe | Deflecting crack | Soldering crack | Effective Cap | EMI FIL® | Other                                   |
|----------------|------|------|----------|-----------------|--------|---------|------------|-----------|------------------|-----------------|---------------|----------|-----------------------------------------|
| General        | GRM  | P24  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | GRM  | WEB  |          |                 |        |         |            |           |                  |                 |               |          | For LED backlight only                  |
|                | GA2  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | GA3  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | GJM  | P91  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | GMA  | P113 |          |                 |        |         |            |           |                  |                 |               |          | Wire bondable                           |
|                | GMD  | P116 |          |                 |        |         |            |           |                  |                 |               |          | Wire bondable                           |
|                | GQM  | P119 |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | GR3  | P130 |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | GR4  | WEB  |          |                 |        |         |            |           |                  |                 |               |          | For communication / information devices |
|                | GR7  | WEB  |          |                 |        |         |            |           |                  |                 |               |          | Limited to camera flashes               |
|                | GRJ  | P132 |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | KR3  | P147 |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | KRM  | P144 |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | LLA  | P136 |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | LLL  | P138 |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | LLM  | P140 |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | LLR  | P142 |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | NFM  | P150 |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | DE1  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | DE2  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | DEJ  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | DHR  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | RDE  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | DHK  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | DHS  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | ECAS | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
| Medical Device | GCH  | P152 |          |                 |        |         |            |           |                  |                 |               |          | For Implanted Medical Devices           |
| Info-tainment  | GRT  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
| Power-train    | GCM  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | GC3  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | GCD  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | GCE  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | GCG  | WEB  |          |                 |        |         |            |           |                  |                 |               |          | Limited to conductive glue mounting     |
|                | GCJ  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | KC3  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | KCA  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | KCM  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | NFM  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | DE6  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | RCE  | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |
|                | RH   | WEB  |          |                 |        |         |            |           |                  |                 |               |          |                                         |

# Catalog information

Catalog relates to a multilayer ceramic capacitor is below.



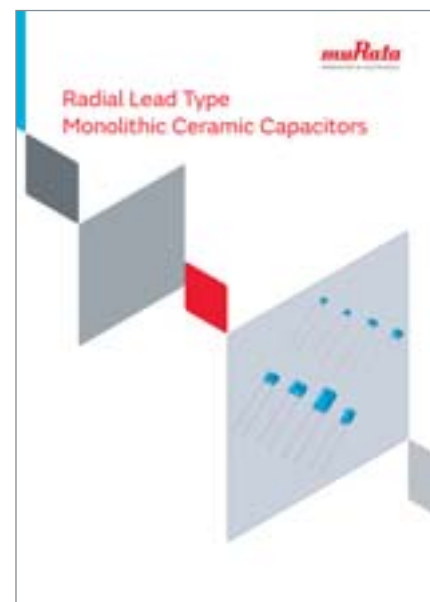
**Chip Monolithic Ceramic Capacitors**  
Cat No. C02E-20



**Chip Monolithic Ceramic Capacitors for Automotive**  
Cat No. C03E-9



**Safety Certified Ceramic Capacitors/ High Voltage Ceramic Capacitors**  
Cat No. C85E-5



**Radial Lead Type Monolithic Ceramic Capacitors**  
Cat No. C49E-23

## ● Part Numbering

### Chip Monolithic Ceramic Capacitors for General



(Part Number)

|    |   |    |   |    |    |     |   |     |   |
|----|---|----|---|----|----|-----|---|-----|---|
| GR | M | 18 | 8 | B1 | 1H | 102 | K | A01 | D |
| ①  | ② | ③  | ④ | ⑤  | ⑥  | ⑦   | ⑧ | ⑨   | ⑩ |

①Product ID ②Series

| Product ID | Code | Series                                                                         |
|------------|------|--------------------------------------------------------------------------------|
| GC         | H    | For implantable medical devices (Non-critical circuits)                        |
| GJ         | M    | High Q type for high frequency                                                 |
| GM         | A    | Wire bondable vertical electrode type                                          |
|            | D    | Wire bondable/AuSn solderable type                                             |
| GQ         | M    | High Q type for high frequency and high power                                  |
| GR         | 3    | High effective capacitance & High allowable ripple current                     |
|            | J    | Soft termination type                                                          |
|            | M    | General purpose products                                                       |
| KR         | 3    | Metal terminal type/High effective capacitance & High allowable ripple current |
|            | M    | Metal terminal type                                                            |
| LL         | A    | 8 terminal low ESL type                                                        |
|            | L    | LW reversed low ESL type                                                       |
|            | M    | 10 terminal low ESL type                                                       |
|            | R    | ESR controlled low ESL type                                                    |

③Chip Dimensions (LxW)

| Code | Dimensions (LxW) | EIA    |
|------|------------------|--------|
| 02   | 0.4x0.2mm        | 01005  |
| 0D   | 0.38x0.38mm      | 015015 |
| 03   | 0.6x0.3mm        | 0201   |
| 05   | 0.5x0.5mm        | 0202   |
| 08   | 0.8x0.8mm        | 0303   |
| 1U   | 0.6x1.0mm        | 02404  |
| 15   | 1.0x0.5mm        | 0402   |
| 18   | 1.6x0.8mm        | 0603   |
| 21   | 2.0x1.25mm       | 0805   |
| 22   | 2.8x2.8mm        | 1111   |
| 31   | 3.2x1.6mm        | 1206   |
| 32   | 3.2x2.5mm        | 1210   |
| 42   | 4.5x2.0mm        | 1808   |
| 43   | 4.5x3.2mm        | 1812   |
| 55   | 5.7x5.0mm        | 2220   |

Continued on the following page. ↗

(Part Number)

| GR | M | 18 | 8 | B1 | 1H | 102 | K | A01 | D  |
|----|---|----|---|----|----|-----|---|-----|----|
| 1  | 2 | 3  | 4 | 5  | 6  | 7   | 8 | 9   | 10 |

Continued from the preceding page. ↘

④ Height Dimension (T) (Except KR□)

| Code | Dimension (T)                    |
|------|----------------------------------|
| 1    | 0.125mm                          |
| 2    | 0.2mm                            |
| 3    | 0.3mm                            |
| 4    | 0.4mm                            |
| 5    | 0.5mm                            |
| 6    | 0.6mm                            |
| 7    | 0.7mm                            |
| 8    | 0.8mm                            |
| 9    | 0.85mm                           |
| A    | 1.0mm                            |
| B    | 1.25mm                           |
| C    | 1.6mm                            |
| D    | 2.0mm                            |
| E    | 2.5mm                            |
| M    | 1.15mm                           |
| Q    | 1.5mm                            |
| S    | 2.8mm                            |
| X    | Depends on individual standards. |

④ Height Dimension (T) (KR□ Only)

| Code | Dimension (T) |
|------|---------------|
| E    | 1.8mm         |
| F    | 1.9mm         |
| K    | 2.7mm         |
| L    | 2.8mm         |
| Q    | 3.7mm         |
| T    | 4.8mm         |
| W    | 6.4mm         |

⑤ Temperature Characteristics

| Temperature Characteristic Codes |                 |                       | Temperature Characteristics |                                               |                     | Operating Temperature Range | Capacitance Change Each Temperature (%) |       |       |       |      |       |
|----------------------------------|-----------------|-----------------------|-----------------------------|-----------------------------------------------|---------------------|-----------------------------|-----------------------------------------|-------|-------|-------|------|-------|
| Code                             | Public STD Code | Reference Temperature | Temperature Range           | Capacitance Change or Temperature Coefficient | -55°C               |                             | *4                                      |       | -10°C |       |      |       |
|                                  |                 |                       |                             |                                               | Max.                |                             | Min.                                    | Max.  | Min.  | Max.  | Min. |       |
| 1X                               | SL              | JIS                   | 20°C                        | 20 to 85°C                                    | +350 to -1000ppm/°C | -55 to 125°C                | -                                       | -     | -     | -     | -    | -     |
| 2C                               | CH              | JIS                   | 20°C                        | 20 to 125°C                                   | 0±60ppm/°C          | -55 to 125°C                | 0.82                                    | -0.45 | 0.49  | -0.27 | 0.33 | -0.18 |
| 3C                               | CJ              | JIS                   | 20°C                        | 20 to 125°C                                   | 0±120ppm/°C         | -55 to 125°C                | 1.37                                    | -0.9  | 0.82  | -0.54 | 0.55 | -0.36 |
| 3U                               | UJ              | JIS                   | 20°C                        | 20 to 85°C                                    | -750±120ppm/°C      | -25 to 85°C                 | -                                       | -     | 4.94  | 2.84  | 3.29 | 1.89  |
| 4C                               | CK              | JIS                   | 20°C                        | 20 to 125°C                                   | 0±250ppm/°C         | -55 to 125°C                | 2.56                                    | -1.88 | 1.54  | -1.13 | 1.02 | -0.75 |
| 5C                               | C0G             | EIA                   | 25°C                        | 25 to 125°C                                   | 0±30ppm/°C          | -55 to 125°C                | 0.58                                    | -0.24 | 0.4   | -0.17 | 0.25 | -0.11 |
| 5G                               | X8G             | *2                    | 25°C                        | 25 to 150°C                                   | 0±30ppm/°C          | -55 to 150°C                | 0.58                                    | -0.24 | 0.4   | -0.17 | 0.25 | -0.11 |
| 7U                               | U2J             | EIA                   | 25°C                        | 25 to 125°C *3                                | -750±120ppm/°C      | -55 to 125°C                | 8.78                                    | 5.04  | 6.04  | 3.47  | 3.84 | 2.21  |
| B1                               | B *1            | JIS                   | 20°C                        | -25 to 85°C                                   | ±10%                | -25 to 85°C                 | -                                       | -     | -     | -     | -    | -     |
| B3                               | B               | JIS                   | 20°C                        | -25 to 85°C                                   | ±10%                | -25 to 85°C                 | -                                       | -     | -     | -     | -    | -     |
| C7                               | X7S             | EIA                   | 25°C                        | -55 to 125°C                                  | ±22%                | -55 to 125°C                | -                                       | -     | -     | -     | -    | -     |
| C8                               | X6S             | EIA                   | 25°C                        | -55 to 105°C                                  | ±22%                | -55 to 105°C                | -                                       | -     | -     | -     | -    | -     |
| D7                               | X7T             | EIA                   | 25°C                        | -55 to 125°C                                  | +22%, -33%          | -55 to 125°C                | -                                       | -     | -     | -     | -    | -     |
| D8                               | X6T             | EIA                   | 25°C                        | -55 to 105°C                                  | +22%, -33%          | -55 to 105°C                | -                                       | -     | -     | -     | -    | -     |
| E7                               | X7U             | EIA                   | 25°C                        | -55 to 125°C                                  | +22%, -56%          | -55 to 125°C                | -                                       | -     | -     | -     | -    | -     |
| R1                               | R *1            | JIS                   | 20°C                        | -55 to 125°C                                  | ±15%                | -55 to 125°C                | -                                       | -     | -     | -     | -    | -     |
| R6                               | X5R             | EIA                   | 25°C                        | -55 to 85°C                                   | ±15%                | -55 to 85°C                 | -                                       | -     | -     | -     | -    | -     |
| R7                               | X7R             | EIA                   | 25°C                        | -55 to 125°C                                  | ±15%                | -55 to 125°C                | -                                       | -     | -     | -     | -    | -     |

\*1 Capacitance change is specified with 50% rated voltage applied.

\*2 Murata Temperature Characteristic Code.

\*3 Rated Voltage 100Vdc max: 25 to 85°C

\*4 -25°C (Reference Temperature 20°C) / -30°C (Reference Temperature 25°C)

Continued on the following page. ↗

(Part Number)

| GR | M | 18 | 8 | B1 | 1H | 102 | K | A01 | D  |
|----|---|----|---|----|----|-----|---|-----|----|
| 1  | 2 | 3  | 4 | 5  | 6  | 7   | 8 | 9   | 10 |

Continued from the preceding page. ↘

#### ⑥ Rated Voltage

| Code | Rated Voltage |
|------|---------------|
| OE   | DC2.5V        |
| OG   | DC4V          |
| OJ   | DC6.3V        |
| 1A   | DC10V         |
| 1C   | DC16V         |
| 1E   | DC25V         |
| 1H   | DC50V         |
| 1J   | DC63V         |
| 1K   | DC80V         |
| 2A   | DC100V        |
| 2D   | DC200V        |
| 2E   | DC250V        |
| 2W   | DC450V        |
| 2H   | DC500V        |
| 2J   | DC630V        |
| 3A   | DC1kV         |
| 3D   | DC2kV         |
| 3F   | DC3.15kV      |
| YA   | DC35V         |

#### ⑦ Capacitance

Expressed by three-digit alphanumerics. The unit is picofarad (pF).  
The first and second figures are significant digits, and the third figure expresses the number of zeros which follow the two numbers. If there is a decimal point, it is expressed by the capital letter "R." In this case, all figures are significant digits.  
If any alphabet, other than "R", is included, this indicates the specific part number is a non-standard part.

Ex.)

| Code | Capacitance |
|------|-------------|
| R50  | 0.50pF      |
| 1R0  | 1.0pF       |
| 100  | 10pF        |
| 103  | 10000pF     |

#### ⑧ Capacitance Tolerance

| Code | Capacitance Tolerance                            |
|------|--------------------------------------------------|
| B    | ±0.1pF                                           |
| C    | ±0.25pF                                          |
| D    | ±0.5pF (Less than 10pF)<br>±0.5% (10pF and over) |
| F    | ±1%                                              |
| G    | ±2%                                              |
| J    | ±5%                                              |
| K    | ±10%                                             |
| M    | ±20%                                             |
| W    | ±0.05pF                                          |

#### ⑨ Individual Specification Code (Except LLR)

Expressed by three figures.

#### ⑨ ESR (LLR Only)

| Code | ESR    |
|------|--------|
| E01  | 100mΩ  |
| E03  | 220mΩ  |
| E05  | 470mΩ  |
| E07  | 1000mΩ |

#### ⑩ Packaging

| Code  | Packaging              |
|-------|------------------------|
| L     | ø180mm Embossed Taping |
| D/E/W | ø180mm Paper Taping    |
| K     | ø330mm Embossed Taping |
| J/F   | ø330mm Paper Taping    |
| B     | Bulk                   |
| C     | Bulk Case              |
| T     | Bulk Tray              |

Please contact us if you find any part number not provided in this table.

### 3 Terminal Low ESL Monolithic Ceramic Capacitors

WEB 

(Part Number)

|    |   |    |    |     |   |    |   |   |
|----|---|----|----|-----|---|----|---|---|
| NF | M | 3D | CC | 102 | R | 1H | 3 | L |
| ①  | ② | ③  | ④  | ⑤   | ⑥ | ⑦  | ⑧ | ⑨ |

#### ①Product ID ②Series

| Product ID | Series                  |
|------------|-------------------------|
| NFM        | 3 Terminal Low ESL Type |

#### ③Dimensions (LxW)

| Code | Dimensions (LxW) | EIA  |
|------|------------------|------|
| 15   | 1.0x0.5mm        | 0402 |
| 18   | 1.6x0.8mm        | 0603 |
| 21   | 2.0x1.25mm       | 0805 |
| 3D   | 3.2x1.25mm       | 1205 |
| 31   | 3.2x1.6mm        | 1206 |
| 41   | 4.5x1.6mm        | 1806 |

#### ④Features

| Code | Features    |                                            |
|------|-------------|--------------------------------------------|
| CC   | For General | For Signal Lines                           |
| PC   |             | For Large Current                          |
| PS   |             | High Insertion Loss Type for Large Current |
| KC   |             | For Very Large Current                     |

#### ⑤Capacitance

Expressed by three figures. The unit is in pico-farad (pF). The first and second figures are significant digits, and the third figure expresses the number of zeros that follow the two figures.

#### ⑥Characteristics

| Code | Capacitance Temperature Characteristics |
|------|-----------------------------------------|
| B    | ±10%, ±12.5%, +10/-13%                  |
| C    | ±22%                                    |
| D    | +22/-33%                                |
| F    | +30/-80%, +30/-84%                      |
| R    | ±15%, +15/-18%                          |

#### ⑦Rated Voltage

| Code | Rated Voltage |
|------|---------------|
| 0E   | 2.5V          |
| 0G   | 4V            |
| 0J   | 6.3V          |
| 1A   | 10V           |
| 1C   | 16V           |
| 1E   | 25V           |
| 1H   | 50V           |
| 2A   | 100V          |

#### ⑧Electrode

| Code | Electrode  |
|------|------------|
| 3    | Sn Plating |

#### ⑨Packaging

| Code | Packaging                     |
|------|-------------------------------|
| B    | Bulk                          |
| L    | Embossed Taping (ø180mm Reel) |
| D    | Paper Taping (ø180mm Reel)    |

## Capacitance Table

p00 Each number in the Part Number List refers to the page number printed at the bottom of the page.

### How to read the Capacitance Table

|                     |         |     |     |     |     |
|---------------------|---------|-----|-----|-----|-----|
| L×W (mm)            | 0.4×0.2 |     | 0.6 |     |     |
| T max. (mm)         | 0.22    |     | 0   |     |     |
| Rated Voltage (Vdc) | 25      |     | 50  |     |     |
| Cap. / TC Code      | C0G     | CΔ  | C0G | CK  | CJ  |
| 0.10pF              |         |     |     |     |     |
| 0.20pF              | p92     | p95 | p98 | p98 |     |
| 1.0pF               | p92     | p95 |     | p98 |     |
| 2.0pF               | p92     | p95 |     | p98 |     |
| 3.0pF               | p92     | p95 |     |     | p98 |

The values can be narrowed down in the order of size, rated voltage, and temperature characteristics.

Refers to the page of the part number list.  
Check the part number list for the applicable product number.

### Temperature Characteristics Table

The Table is colored by temperature characteristic codes.  
Refer to the following Table for the meaning of each code.

|                                    |     |     |     |     |     |     |     |     |     |
|------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| EIA:                               | C0G | U2J | X7R | X7S | X7T | X7U | X6S | X6T | X5R |
| JIS:                               | CK  | CJ  | CH  | SL  | UJ  | R   | B   |     |     |
| Murata Temperature Characteristic: | X8G |     |     |     |     |     |     |     |     |

| Temperature Characteristic Codes |                       | Temperature Characteristics |                                               |                     | Operating Temperature Range | Capacitance Change Each Temperature (%) |       |       |       |      |       |
|----------------------------------|-----------------------|-----------------------------|-----------------------------------------------|---------------------|-----------------------------|-----------------------------------------|-------|-------|-------|------|-------|
| Public STD Code                  | Reference Temperature | Temperature Range           | Capacitance Change or Temperature Coefficient | -55°C               |                             | *3                                      |       | -10°C |       |      |       |
|                                  |                       |                             |                                               | Max.                |                             | Min.                                    | Max.  | Min.  | Max.  | Min. |       |
| C0G                              | EIA                   | 25°C                        | 25 to 125°C                                   | 0±30ppm/°C          | -55 to 125°C                | 0.58                                    | -0.24 | 0.4   | -0.17 | 0.25 | -0.11 |
| CK                               | JIS                   | 20°C                        | 20 to 125°C                                   | 0±250ppm/°C         | -55 to 125°C                | 2.56                                    | -1.88 | 1.54  | -1.13 | 1.02 | -0.75 |
| CJ                               | JIS                   | 20°C                        | 20 to 125°C                                   | 0±120ppm/°C         | -55 to 125°C                | 1.37                                    | -0.9  | 0.82  | -0.54 | 0.55 | -0.36 |
| CH                               | JIS                   | 20°C                        | 20 to 125°C                                   | 0±60ppm/°C          | -55 to 125°C                | 0.82                                    | -0.45 | 0.49  | -0.27 | 0.33 | -0.18 |
| SL                               | JIS                   | 20°C                        | 20 to 85°C                                    | +350 to -1000ppm/°C | -55 to 125°C                | -                                       | -     | -     | -     | -    | -     |
| U2J                              | EIA                   | 25°C                        | 25 to 125°C *2                                | -750±120ppm/°C      | -55 to 125°C                | 8.78                                    | 5.04  | 6.04  | 3.47  | 3.84 | 2.21  |
| UJ                               | JIS                   | 20°C                        | 20 to 85°C                                    | -750±120ppm/°C      | -25 to 85°C                 | -                                       | -     | 4.94  | 2.84  | 3.29 | 1.89  |
| X8G                              | *1                    | 25°C                        | 25 to 150°C                                   | 0±30ppm/°C          | -55 to 150°C                | 0.58                                    | -0.24 | 0.4   | -0.17 | 0.25 | -0.11 |
| X7R                              | EIA                   | 25°C                        | -55 to 125°C                                  | ±15%                | -55 to 125°C                | -                                       | -     | -     | -     | -    | -     |
| X7S                              | EIA                   | 25°C                        | -55 to 125°C                                  | ±22%                | -55 to 125°C                | -                                       | -     | -     | -     | -    | -     |
| X7T                              | EIA                   | 25°C                        | -55 to 125°C                                  | +22%, -33%          | -55 to 125°C                | -                                       | -     | -     | -     | -    | -     |
| X7U                              | EIA                   | 25°C                        | -55 to 125°C                                  | +22%, -56%          | -55 to 125°C                | -                                       | -     | -     | -     | -    | -     |
| R                                | JIS                   | 20°C                        | -55 to 125°C                                  | ±15%                | -55 to 125°C                | -                                       | -     | -     | -     | -    | -     |
| X6S                              | EIA                   | 25°C                        | -55 to 105°C                                  | ±22%                | -55 to 105°C                | -                                       | -     | -     | -     | -    | -     |
| X6T                              | EIA                   | 25°C                        | -55 to 105°C                                  | +22%, -33%          | -55 to 105°C                | -                                       | -     | -     | -     | -    | -     |
| X5R                              | EIA                   | 25°C                        | -55 to 85°C                                   | ±15%                | -55 to 85°C                 | -                                       | -     | -     | -     | -    | -     |
| B                                | JIS                   | 20°C                        | -25 to 85°C                                   | ±10%                | -25 to 85°C                 | -                                       | -     | -     | -     | -    | -     |

\*1 Murata Temperature Characteristic Code.

\*2 Rated Voltage 100Vdc max: 25 to 85°C

\*3 -25°C (Reference Temperature 20°C) / -30°C (Reference Temperature 25°C)

## Capacitance Table

p00

Each number in the Part Number List refers to the page number printed at the bottom of the page.

### GRM Series Temperature Compensating Type

| p00                 | ← Part Number List |     |     |     |     |     |         |     |     |     | JIS: | CK  | CJ      | CH  | SL  | UJ  | EIA:                                                                                                             | COG | U2J     |     |     |     |     |     |     |     |     |     |
|---------------------|--------------------|-----|-----|-----|-----|-----|---------|-----|-----|-----|------|-----|---------|-----|-----|-----|------------------------------------------------------------------------------------------------------------------|-----|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| L×W (mm)            | 0.4×0.2            |     |     |     |     |     | 0.6×0.3 |     |     |     |      |     | 1.0×0.5 |     |     |     |                                                                                                                  |     | 1.6×0.8 |     |     |     |     |     |     |     |     |     |
| T max. (mm)         | 0.22               |     |     |     |     |     | 0.33    |     |     |     |      |     | 0.55    |     |     |     |                                                                                                                  |     | 0.9     |     |     |     |     |     |     |     |     |     |
| Rated Voltage (Vdc) | 50                 |     | 25  |     | 16  |     | 100     |     | 50  |     | 25   |     | 100     |     | 50  |     | 10                                                                                                               |     | 50      |     |     |     | 10  |     | 100 |     |     |     |
| Cap. / TC Code      | COG                | CA  | COG | CH  | COG | CH  | COG     | CA  | COG | CA  | COG  | CH  | COG     | CA  | COG | CA  | SL                                                                                                               | U2J | UJ      | SL  | U2J | UJ  | SL  | U2J | UJ  | COG | CA  |     |
| 0.10pF              |                    |     |     |     |     |     | p32     | p35 | p38 | p41 |      |     | p45     | p48 | p52 | p55 |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 0.20pF              | p25                | p28 |     |     |     |     | p32     | p35 | p38 | p41 |      |     | p45     | p48 | p52 | p55 | The indication for every 0.1 pF has been omitted for less than 10 pF. Refer to the Part Number List for details. |     |         |     |     |     |     |     |     | p59 | p63 |     |
| 0.50pF              | p25                | p28 |     |     |     |     | p32     | p35 | p38 | p41 |      |     | p45     | p49 | p52 | p55 |                                                                                                                  |     |         |     |     |     |     |     |     |     | p60 | p63 |
| 1.0pF               | p25                | p28 |     |     |     |     | p32     | p35 | p38 | p41 |      |     | p45     | p49 | p52 | p56 |                                                                                                                  |     |         |     |     |     |     |     |     |     | p60 | p63 |
| 2.0pF               | p25                | p28 |     |     |     |     | p32     | p35 | p38 | p42 |      |     | p46     | p49 | p52 | p56 |                                                                                                                  |     |         |     |     |     |     |     |     |     | p60 | p63 |
| 3.0pF               | p25                | p29 |     |     |     |     | p32     | p35 | p39 | p42 |      |     | p46     | p49 | p53 | p56 |                                                                                                                  |     |         |     |     |     |     |     |     |     | p61 | p64 |
| 4.0pF               | p26                | p29 |     |     |     |     | p33     | p36 | p39 | p42 |      |     | p46     | p49 | p53 | p56 |                                                                                                                  |     |         |     |     |     |     |     |     |     | p60 | p64 |
| 5.0pF               | p26                | p29 |     |     |     |     | p33     | p36 | p39 | p43 |      |     | p46     | p50 | p53 | p57 |                                                                                                                  |     |         |     |     |     |     |     |     |     | p61 | p64 |
| 6.0pF               | p26                | p30 |     |     |     |     | p33     | p36 | p40 | p43 |      |     | p47     | p50 | p53 | p57 |                                                                                                                  |     |         |     |     |     |     |     |     |     | p61 | p64 |
| 7.0pF               | p27                | p30 |     |     |     |     | p34     | p37 | p40 | p43 |      |     | p47     | p50 | p54 | p57 |                                                                                                                  |     |         |     |     |     |     |     |     |     | p61 | p65 |
| 8.0pF               | p27                | p30 |     |     |     |     | p34     | p37 | p40 | p44 |      |     | p47     | p51 | p54 | p58 |                                                                                                                  |     |         |     |     |     |     |     |     |     | p62 | p65 |
| 9.0pF               | p27                | p31 |     |     |     |     | p34     | p37 | p41 | p44 |      |     | p48     | p51 | p55 | p58 |                                                                                                                  |     |         |     |     |     |     |     |     | p62 | p65 |     |
| 10pF                | p28                | p31 |     |     |     |     | p35     | p38 | p41 | p44 |      |     | p48     | p52 | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 11pF                | p28                | p31 |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 12pF                | p28                | p31 |     |     |     |     | p35     | p38 | p41 | p44 |      |     | p48     | p52 | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 13pF                | p28                | p31 |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 15pF                | p28                | p31 |     |     |     |     | p35     | p38 | p41 | p44 |      |     | p48     | p52 | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 16pF                | p28                | p31 |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 17pF                | p28                | p31 |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 18pF                | p28                | p31 |     |     |     |     |         |     | p41 | p45 |      |     | p48     | p52 | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 19pF                | p28                | p31 |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 20pF                | p28                | p31 |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 21pF                | p28                | p31 |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 22pF                | p28                | p31 |     |     |     |     |         |     | p41 | p45 |      |     | p48     | p52 | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 23pF                | p28                | p31 |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 24pF                | p28                | p31 |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 27pF                | p28                | p31 |     |     |     |     |         |     | p41 | p45 |      |     | p48     | p52 | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 30pF                | p28                | p31 |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 33pF                | p28                | p31 |     |     |     |     |         |     | p41 | p45 |      |     | p48     | p52 | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 36pF                | p28                | p31 |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 39pF                | p28                | p31 |     |     |     |     |         |     | p41 | p45 |      |     | p48     | p52 | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 43pF                | p28                | p31 |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 47pF                | p28                | p31 |     |     |     |     |         |     | p41 | p45 |      |     | p48     | p52 | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 51pF                | p28                | p31 |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 56pF                | p28                | p31 |     |     |     |     |         |     | p41 | p45 |      |     | p48     | p52 | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 62pF                | p28                | p31 |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 68pF                | p28                | p31 |     |     |     |     |         |     | p41 | p45 |      |     | p48     | p52 | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 75pF                | p28                | p31 |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 82pF                | p28                | p31 |     |     |     |     |         |     | p41 | p45 |      |     | p48     | p52 | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 91pF                | p28                | p31 |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 100pF               | p28                | p31 |     |     |     |     |         |     | p41 | p45 |      |     | p48     | p52 | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 120pF               |                    |     | p31 | p31 | p31 | p31 |         |     | p41 | p45 |      |     |         |     | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 150pF               |                    |     | p31 | p31 | p31 | p32 |         |     | p41 | p45 |      |     |         |     | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 180pF               |                    |     | p31 | p31 | p31 | p32 |         |     | p41 | p45 |      |     |         |     | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 220pF               |                    |     | p31 | p31 | p31 | p32 |         |     | p41 | p45 |      |     |         |     | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 270pF               |                    |     |     |     |     |     |         |     |     |     | p45  | p45 |         |     | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 330pF               |                    |     |     |     |     |     |         |     |     |     | p45  | p45 |         |     | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 390pF               |                    |     |     |     |     |     |         |     |     |     | p45  | p45 |         |     | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 470pF               |                    |     |     |     |     |     |         |     |     |     | p45  | p45 |         |     | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 560pF               |                    |     |     |     |     |     |         |     |     |     | p45  | p45 |         |     | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 680pF               |                    |     |     |     |     |     |         |     |     |     | p45  | p45 |         |     | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 820pF               |                    |     |     |     |     |     |         |     |     |     | p45  | p45 |         |     | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 910pF               |                    |     |     |     |     |     |         |     |     |     | p45  |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 1000pF              |                    |     |     |     |     |     |         |     |     |     | p45  | p45 |         |     | p55 | p59 |                                                                                                                  |     |         |     |     |     |     |     |     | p63 | p66 |     |
| 1200pF              |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     | p59                                                                                                              | p59 | p59     |     |     |     |     |     |     | p63 | p66 |     |
| 1500pF              |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     | p59                                                                                                              | p59 | p59     |     |     |     |     |     |     | p63 | p66 |     |
| 1800pF              |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     | p59                                                                                                              | p59 | p59     |     |     |     |     |     |     | p63 | p66 |     |
| 2200pF              |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     | p59                                                                                                              | p59 | p59     | p59 | p59 | p59 |     |     |     |     |     |     |
| 2700pF              |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     | p59                                                                                                              | p59 | p59     | p59 | p59 | p59 |     |     |     |     |     |     |
| 3300pF              |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     | p59                                                                                                              | p59 | p59     | p59 | p59 | p59 |     |     |     |     |     |     |
| 3900pF              |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     | p59                                                                                                              | p59 | p59     | p59 | p59 | p59 |     |     |     |     |     |     |
| 4700pF              |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     | p59                                                                                                              | p59 | p59     | p59 | p59 | p59 |     |     |     |     |     |     |
| 5600pF              |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     | p59 | p59 | p59 |     |     |     |
| 6800pF              |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     | p59 | p59 | p59 |     |     |     |
| 8200pF              |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     | p59 | p59 | p59 |     |     |     |
| 10000pF             |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     | p59 | p59 | p59 |     |     |     |
| 12000pF             |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 15000pF             |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 18000pF             |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 22000pF             |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 27000pF             |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 33000pF             |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 39000pF             |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 47000pF             |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 56000pF             |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 68000pF             |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 82000pF             |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 0.10μF              |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |
| 0.12μF              |                    |     |     |     |     |     |         |     |     |     |      |     |         |     |     |     |                                                                                                                  |     |         |     |     |     |     |     |     |     |     |     |

The indication for every 0.1 pF has been omitted for less than 10 pF. Refer to the Part Number List for details.

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**p00** Each number in the Part Number List refers to the page number printed at the bottom of the page.

p00 ← Part Number List      JIS: CK   CJ   CH   SL   UJ      EIA: C0G   U2J

| L×W (mm)            | 1.6×0.8 |     |    |     |    |    |     |    | 2.0×1.25 |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
|---------------------|---------|-----|----|-----|----|----|-----|----|----------|----|----|----|-----|----|-----|----|------|-----|----|----|-----|----|-----|-----|-----|-----|--|--|
| T max. (mm)         | 0.9     |     |    |     |    |    |     |    | 0.7      |    |    |    |     |    |     |    | 0.95 |     |    |    |     |    |     |     | 1.0 |     |  |  |
| Rated Voltage (Vdc) | 50      |     |    |     | 10 |    |     |    | 100      |    | 50 |    |     |    | 50  |    |      |     | 10 |    |     |    | 250 |     | 200 |     |  |  |
| Cap. / TC Code      | COG     | CΔ  | SL | U2J | UJ | SL | U2J | UJ | COG      | CH | CH | SL | U2J | UJ | COG | CH | SL   | U2J | UJ | SL | U2J | UJ | COG | U2J | COG | U2J |  |  |
| 0.10pF              |         |     |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 0.20pF              |         |     |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 0.50pF              | p66     | p69 |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 1.0pF               | p66     | p70 |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 2.0pF               | p66     | p70 |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 3.0pF               | p67     | p70 |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 4.0pF               | p67     | p70 |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 5.0pF               | p67     | p71 |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 6.0pF               | p68     | p71 |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 7.0pF               | p68     | p71 |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 8.0pF               | p68     | p72 |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 9.0pF               | p69     | p72 |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 10pF                | p69     | p73 |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     | p74 |     | p75 |  |  |
| 11pF                |         |     |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 12pF                | p69     | p73 |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     | p74 |     | p75 |  |  |
| 13pF                |         |     |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 15pF                | p69     | p73 |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     | p74 |     | p75 |  |  |
| 16pF                |         |     |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 17pF                |         |     |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 18pF                | p69     | p73 |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     | p74 |     | p75 |  |  |
| 19pF                |         |     |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 20pF                |         |     |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 21pF                |         |     |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 22pF                | p69     | p73 |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     | p74 |     | p75 |  |  |
| 23pF                |         |     |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 24pF                |         |     |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 27pF                | p69     | p73 |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     | p74 |     | p75 |  |  |
| 30pF                |         |     |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 33pF                | p69     | p73 |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     | p74 |     | p75 |  |  |
| 36pF                |         |     |    |     |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |
| 39pF                | p69     | p73 |    | </  |    |    |     |    |          |    |    |    |     |    |     |    |      |     |    |    |     |    |     |     |     |     |  |  |

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# Capacitance Table

p00 Each number in the Part Number List refers to the page number printed at the bottom of the page.

## (→ GRM Series Temperature Compensating Type)

| p00                 | ← Part Number List |     |    |      |    |    |     |    |    |      | JIS: <div>CK</div> <div>CJ</div> <div>CH</div> <div>SL</div> <div>UJ</div> |     |     |     | EIA: <div>COG</div> <div>U2J</div> |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
|---------------------|--------------------|-----|----|------|----|----|-----|----|----|------|----------------------------------------------------------------------------|-----|-----|-----|------------------------------------|----|-----|----|----|-----|----|-----|-----|-----|-----|------|-----|------|--|-----|--|-----|
| L×W (mm)            | 2.0×1.25           |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     | 3.2×1.6                            |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| T max. (mm)         | 1.0                |     |    | 1.35 |    |    |     |    |    | 1.45 |                                                                            |     |     |     | 0.95                               |    |     |    |    |     |    |     |     | 1.0 |     |      |     |      |  |     |  |     |
| Rated Voltage (Vdc) | 50                 |     |    | 50   |    |    |     |    |    | 250  |                                                                            |     |     |     | 200                                |    | 100 |    |    | 50  |    |     |     |     |     | 2000 |     | 1000 |  | 630 |  | 500 |
| Cap. / TC Code      | SL                 | U2J | UJ | COG  | CH | SL | U2J | UJ | SL | U2J  | UJ                                                                         | COG | U2J | U2J | COG                                | CH | COG | CH | SL | U2J | UJ | U2J | COG | U2J | COG | U2J  | COG |      |  |     |  |     |
| 0.10pF              |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 0.20pF              |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 0.50pF              |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 1.0pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 2.0pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 3.0pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 4.0pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 5.0pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 6.0pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 7.0pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 8.0pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 9.0pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 10pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 11pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 12pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 13pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 15pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 16pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 17pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 18pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 19pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 20pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 21pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 22pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 23pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 24pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 27pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 30pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 33pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 36pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 39pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 43pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 47pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 51pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 56pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 62pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 68pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 75pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 82pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     | p76 | p76  | p77 |      |  |     |  |     |
| 91pF                |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 100pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 120pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 150pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 180pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 220pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 270pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 330pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 390pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 470pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 560pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     | p76 | p76 | p76  | p77 |      |  |     |  |     |
| 680pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 820pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 910pF               |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 1000pF              |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 1200pF              |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 1500pF              |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 1800pF              |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 2200pF              |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 2700pF              |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 3300pF              |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 3900pF              |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 4700pF              |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 5600pF              |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 6800pF              |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 8200pF              |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 10000pF             |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 12000pF             |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 15000pF             |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 18000pF             |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 22000pF             |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 27000pF             |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 33000pF             |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 39000pF             |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 47000pF             |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 56000pF             |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 68000pF             |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 82000pF             |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 0.10μF              |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |
| 0.12μF              |                    |     |    |      |    |    |     |    |    |      |                                                                            |     |     |     |                                    |    |     |    |    |     |    |     |     |     |     |      |     |      |  |     |  |     |

Continued on the following page. ↗

# Capacitance Table

p00 Each number in the Part Number List refers to the page number printed at the bottom of the page.

(→ GRM Series Temperature Compensating Type)

| p00                 | ← Part Number List |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     | JIS: | CK   | CJ  | CH  | SL  | UJ  | EIA: | COG | U2J |     |     |  |
|---------------------|--------------------|-----|-----|------|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|----|-----|------|------|-----|-----|-----|-----|------|-----|-----|-----|-----|--|
| L×W (mm)            | 3.2×1.6            |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| T max. (mm)         | 1.0                |     |     |      |     |     |     |     | 1.25 |     |     |     |     |     |    |     |      |      |     |     | 1.8 |     |      |     |     |     |     |  |
| Rated Voltage (Vdc) | 500                | 250 | 200 | 1000 |     | 630 |     | 500 |      | 250 |     | 200 | 100 | 50  |    |     |      | 1000 |     | 630 |     | 500 | 250  |     |     |     |     |  |
| Cap. / TC Code      | U2J                | COG | U2J | U2J  | COG | U2J | COG | U2J | COG  | U2J | COG | U2J | U2J | COG | UH | COG | CH   | SL   | U2J | UJ  | COG | U2J | COG  | U2J | U2J | COG | U2J |  |
| 0.10pF              |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 0.20pF              |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 0.50pF              |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 1.0pF               |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 2.0pF               |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 3.0pF               |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 4.0pF               |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 5.0pF               |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 6.0pF               |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 7.0pF               |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 8.0pF               |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 9.0pF               |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 10pF                | p77                |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 11pF                |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 12pF                | p77                |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 13pF                |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 15pF                | p77                |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 16pF                |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 17pF                |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 18pF                | p77                |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 19pF                |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 20pF                |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 21pF                |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 22pF                | p77                |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 23pF                |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 24pF                |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 27pF                | p77                |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 30pF                |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 33pF                | p77                |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 36pF                |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 39pF                | p77                |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 43pF                |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 47pF                | p77                |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 51pF                |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 56pF                | p77                |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 62pF                |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 68pF                | p77                |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 75pF                |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 82pF                | p77                |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 91pF                |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 100pF               | p77                |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 120pF               | p77                |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 150pF               | p77                |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 180pF               | p77                |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 220pF               | p77                |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 270pF               | p77                |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 330pF               | p77                |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 390pF               | p77                | p77 |     |      |     | p77 |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 470pF               | p77                | p77 |     |      |     | p77 |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 560pF               | p77                | p77 |     |      | p77 | p77 |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 680pF               | p77                | p77 |     |      | p77 | p78 |     |     | p78  |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 820pF               | p77                | p77 |     |      |     | p78 |     |     | p78  |     |     |     |     |     |    |     |      |      |     |     |     | p78 | p78  |     |     |     |     |  |
| 910pF               |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 1000pF              | p77                | p77 |     |      |     | p78 |     |     | p78  |     |     |     |     |     |    |     |      |      |     |     |     | p78 | p78  |     |     |     |     |  |
| 1200pF              | p77                | p77 |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 1500pF              | p77                | p77 |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 1800pF              | p77                | p77 |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 2200pF              | p77                | p77 |     |      |     | p78 |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 2700pF              |                    | p77 | p77 | p77  |     | p78 | p78 |     | p78  |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 3300pF              |                    | p77 | p77 | p77  |     |     |     | p78 |      | p78 |     |     |     |     |    |     |      |      |     |     |     |     | p78  |     |     |     |     |  |
| 3900pF              |                    | p77 | p77 | p77  |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     | p78  | p78 |     |     |     |  |
| 4700pF              |                    | p77 | p77 | p77  |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     | p78 | p78  |     |     |     |     |  |
| 5600pF              |                    | p77 | p77 | p77  |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 6800pF              |                    | p77 |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 8200pF              |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 10000pF             |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 12000pF             |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 15000pF             |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 18000pF             |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 22000pF             |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 27000pF             |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 33000pF             |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 39000pF             |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 47000pF             |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 56000pF             |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 68000pF             |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 82000pF             |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 0.10μF              |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |
| 0.12μF              |                    |     |     |      |     |     |     |     |      |     |     |     |     |     |    |     |      |      |     |     |     |     |      |     |     |     |     |  |

Continued on the following page. ↗

# Capacitance Table

**p00** Each number in the Part Number List refers to the page number printed at the bottom of the page.

## (→ GRM Series Temperature Compensating Type)

| p00 ← Part Number List |         | JIS: <div>CK</div> <div>CJ</div> <div>CH</div> <div>SL</div> <div>UJ</div> |     |     |     |     |     |     | EIA: <div>COG</div> <div>U2J</div> |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
|------------------------|---------|----------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|------------------------------------|-----|-----|------|------|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|------|---------|---------|--|--|
| L×W (mm)               | 3.2×1.6 |                                                                            |     |     |     |     |     |     | 3.2×2.5                            |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      | 4.5×2.0 | 4.5×3.2 |  |  |
| T max. (mm)            | 1.8     |                                                                            |     |     |     |     |     |     | 1.0                                |     |     | 1.25 |      |     |     | 1.5  |     |     |     | 2.0  |     |     |     | 1.0  |      | 1.5     |         |  |  |
| Rated Voltage (Vdc)    | 100     |                                                                            | 50  |     | 25  |     | 16  |     | 2000                               | 630 | 500 | 2000 | 1000 | 630 | 500 | 1000 | 630 | 500 | 250 | 1000 | 630 | 500 | 250 | 3150 | 1000 | 630     | 500     |  |  |
| Cap. / TC Code         | COG     | CH                                                                         | COG | CH  | COG | CH  | COG | CH  | U2J                                | U2J | U2J | U2J  | U2J  | U2J | U2J | U2J  | U2J | U2J | U2J | U2J  | U2J | U2J | U2J | U2J  | U2J  | U2J     | U2J     |  |  |
| 0.10pF                 |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 0.20pF                 |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 0.50pF                 |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 1.0pF                  |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 2.0pF                  |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 3.0pF                  |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 4.0pF                  |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 5.0pF                  |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 6.0pF                  |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 7.0pF                  |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 8.0pF                  |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 9.0pF                  |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 10pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 11pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 12pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 13pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 15pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 16pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 17pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 18pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 19pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 20pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 21pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 22pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 23pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 24pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 27pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 30pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 33pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 36pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 39pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 43pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 47pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 51pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 56pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 62pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 68pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 75pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 82pF                   |         |                                                                            |     |     |     |     |     |     | p78                                |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 91pF                   |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 100pF                  |         |                                                                            |     |     |     |     |     |     | p78                                |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 120pF                  |         |                                                                            |     |     |     |     |     |     | p78                                |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 150pF                  |         |                                                                            |     |     |     |     |     |     | p78                                |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 180pF                  |         |                                                                            |     |     |     |     |     |     |                                    |     |     | p78  |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 220pF                  |         |                                                                            |     |     |     |     |     |     |                                    |     |     | p78  |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 270pF                  |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 330pF                  |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 390pF                  |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 470pF                  |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 560pF                  |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 680pF                  |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 820pF                  |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 910pF                  |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 1000pF                 |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 1200pF                 |         |                                                                            |     |     |     |     |     |     | p78                                | p78 |     | p78  |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 1500pF                 |         |                                                                            |     |     |     |     |     |     | p78                                | p78 |     |      |      |     |     | p78  |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 1800pF                 |         |                                                                            |     |     |     |     |     |     | p78                                | p78 |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 2200pF                 |         |                                                                            |     |     |     |     |     |     | p78                                | p78 |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 2700pF                 |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 3300pF                 |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 3900pF                 |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 4700pF                 |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 5600pF                 |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 6800pF                 |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 8200pF                 |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 10000pF                |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 12000pF                |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 15000pF                |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 18000pF                |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 22000pF                |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 27000pF                |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 33000pF                |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 39000pF                |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 47000pF                |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 56000pF                |         |                                                                            |     |     |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 68000pF                | p78     | p78                                                                        | p78 | p78 |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 82000pF                | p78     | p78                                                                        | p78 | p78 |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 0.10μF                 | p78     | p78                                                                        | p78 | p78 |     |     |     |     |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |
| 0.12μF                 |         |                                                                            |     |     | p78 | p78 | p78 | p78 |                                    |     |     |      |      |     |     |      |     |     |     |      |     |     |     |      |      |         |         |  |  |

# Capacitance Table

p00

Each number in the Part Number List refers to the page number printed at the bottom of the page.

## (→ GRM Series Temperature Compensating Type)

|                     |                    |     |     |                     |     |     |              |     |     |
|---------------------|--------------------|-----|-----|---------------------|-----|-----|--------------|-----|-----|
| p00                 | ← Part Number List |     |     | JIS: CK CJ CH SL UJ |     |     | EIA: C0G U2J |     |     |
| L×W (mm)            | 4.5×3.2            |     |     | 5.7×5.0             |     |     |              |     |     |
| T max. (mm)         | 2.0                |     |     | 1.5                 |     |     | 2.0          |     |     |
| Rated Voltage (Vdc) | 1000               | 630 | 500 | 1000                | 630 | 500 | 1000         | 630 | 500 |
| Cap. / TC Code      | U2J                | U2J | U2J | U2J                 | U2J | U2J | U2J          | U2J | U2J |
| 0.10pF              |                    |     |     |                     |     |     |              |     |     |
| 0.20pF              |                    |     |     |                     |     |     |              |     |     |
| 0.50pF              |                    |     |     |                     |     |     |              |     |     |
| 1.0pF               |                    |     |     |                     |     |     |              |     |     |
| 2.0pF               |                    |     |     |                     |     |     |              |     |     |
| 3.0pF               |                    |     |     |                     |     |     |              |     |     |
| 4.0pF               |                    |     |     |                     |     |     |              |     |     |
| 5.0pF               |                    |     |     |                     |     |     |              |     |     |
| 6.0pF               |                    |     |     |                     |     |     |              |     |     |
| 7.0pF               |                    |     |     |                     |     |     |              |     |     |
| 8.0pF               |                    |     |     |                     |     |     |              |     |     |
| 9.0pF               |                    |     |     |                     |     |     |              |     |     |
| 10pF                |                    |     |     |                     |     |     |              |     |     |
| 11pF                |                    |     |     |                     |     |     |              |     |     |
| 12pF                |                    |     |     |                     |     |     |              |     |     |
| 13pF                |                    |     |     |                     |     |     |              |     |     |
| 15pF                |                    |     |     |                     |     |     |              |     |     |
| 16pF                |                    |     |     |                     |     |     |              |     |     |
| 17pF                |                    |     |     |                     |     |     |              |     |     |
| 18pF                |                    |     |     |                     |     |     |              |     |     |
| 19pF                |                    |     |     |                     |     |     |              |     |     |
| 20pF                |                    |     |     |                     |     |     |              |     |     |
| 21pF                |                    |     |     |                     |     |     |              |     |     |
| 22pF                |                    |     |     |                     |     |     |              |     |     |
| 23pF                |                    |     |     |                     |     |     |              |     |     |
| 24pF                |                    |     |     |                     |     |     |              |     |     |
| 27pF                |                    |     |     |                     |     |     |              |     |     |
| 30pF                |                    |     |     |                     |     |     |              |     |     |
| 33pF                |                    |     |     |                     |     |     |              |     |     |
| 36pF                |                    |     |     |                     |     |     |              |     |     |
| 39pF                |                    |     |     |                     |     |     |              |     |     |
| 43pF                |                    |     |     |                     |     |     |              |     |     |
| 47pF                |                    |     |     |                     |     |     |              |     |     |
| 51pF                |                    |     |     |                     |     |     |              |     |     |
| 56pF                |                    |     |     |                     |     |     |              |     |     |
| 62pF                |                    |     |     |                     |     |     |              |     |     |
| 68pF                |                    |     |     |                     |     |     |              |     |     |
| 75pF                |                    |     |     |                     |     |     |              |     |     |
| 82pF                |                    |     |     |                     |     |     |              |     |     |
| 91pF                |                    |     |     |                     |     |     |              |     |     |
| 100pF               |                    |     |     |                     |     |     |              |     |     |
| 120pF               |                    |     |     |                     |     |     |              |     |     |
| 150pF               |                    |     |     |                     |     |     |              |     |     |
| 180pF               |                    |     |     |                     |     |     |              |     |     |
| 220pF               |                    |     |     |                     |     |     |              |     |     |
| 270pF               |                    |     |     |                     |     |     |              |     |     |
| 330pF               |                    |     |     |                     |     |     |              |     |     |
| 390pF               |                    |     |     |                     |     |     |              |     |     |
| 470pF               |                    |     |     |                     |     |     |              |     |     |
| 560pF               |                    |     |     |                     |     |     |              |     |     |
| 680pF               |                    |     |     |                     |     |     |              |     |     |
| 820pF               |                    |     |     |                     |     |     |              |     |     |
| 910pF               |                    |     |     |                     |     |     |              |     |     |
| 1000pF              |                    |     |     |                     |     |     |              |     |     |
| 1200pF              |                    |     |     |                     |     |     |              |     |     |
| 1500pF              |                    |     |     |                     |     |     |              |     |     |
| 1800pF              |                    |     |     |                     |     |     |              |     |     |
| 2200pF              |                    |     |     |                     |     |     |              |     |     |
| 2700pF              |                    |     |     |                     |     |     |              |     |     |
| 3300pF              |                    |     |     |                     |     |     |              |     |     |
| 3900pF              | p79                |     |     |                     |     |     |              |     |     |
| 4700pF              | p79                |     |     |                     |     |     |              |     |     |
| 5600pF              |                    |     |     | p79                 |     |     |              |     |     |
| 6800pF              |                    |     |     | p79                 |     |     |              |     |     |
| 8200pF              |                    |     |     |                     |     |     | p79          |     |     |
| 10000pF             |                    |     |     |                     |     |     | p79          |     |     |
| 12000pF             |                    |     |     |                     |     |     |              |     |     |
| 15000pF             |                    | p79 | p79 |                     |     |     |              |     |     |
| 18000pF             |                    | p79 | p79 |                     |     |     |              |     |     |
| 22000pF             |                    | p79 | p79 |                     |     |     |              |     |     |
| 27000pF             |                    |     |     |                     | p79 | p79 |              |     |     |
| 33000pF             |                    |     |     |                     |     |     |              | p79 | p79 |
| 39000pF             |                    |     |     |                     |     |     |              | p79 | p79 |
| 47000pF             |                    |     |     |                     |     |     |              | p79 | p79 |
| 56000pF             |                    |     |     |                     |     |     |              |     |     |
| 68000pF             |                    |     |     |                     |     |     |              |     |     |
| 82000pF             |                    |     |     |                     |     |     |              |     |     |
| 0.10μF              |                    |     |     |                     |     |     |              |     |     |
| 0.12μF              |                    |     |     |                     |     |     |              |     |     |

# Capacitance Table

**p00** Each number in the Part Number List refers to the page number printed at the bottom of the page.

## GRM Series High Dielectric Constant Type

|                     |                    |         |     |        |        |     |     |     |     |     |     |         |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
|---------------------|--------------------|---------|-----|--------|--------|-----|-----|-----|-----|-----|-----|---------|-----|--------|--------|--------------------------------|--------|---------------------------------------------------------------------------------------------------------------|--------|--------|-----|--------|-----|--------|-----|--------|-----|---------|-----|--------|-----|--------|-----|--------|
| p00                 | ← Part Number List |         |     |        |        |     |     |     |     |     |     |         |     |        |        | JIS: <div>R</div> <div>B</div> |        | EIA: <div>X7R</div> <div>X7S</div> <div>X7T</div> <div>X7U</div> <div>X6S</div> <div>X6T</div> <div>X5R</div> |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| L×W (mm)            |                    | 0.4×0.2 |     |        |        |     |     |     |     |     |     | 0.6×0.3 |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     | 1.0×0.5 |     |        |     |        |     |        |
| T max. (mm)         |                    | 0.22    |     |        |        |     |     |     |     |     |     | 0.33    |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     | 0.22    |     |        |     |        |     |        |
| Rated Voltage (Vdc) |                    | 16      | 10  | 6.3    | 4      | 2.5 | 50  | 35  | 25  | 16  |     |         | 10  |        |        | 6.3                            |        |                                                                                                               | 4      | 10     | 6.3 | 4      |     |        |     |        |     |         |     |        |     |        |     |        |
| Cap. / TC Code      |                    | X7R     | X7R | X5R, B | X5R, B | X6T | X5R | X6T | X7R | B   | X5R | X7R, R  | X6S | X5R, B | X7Δ, R | X6S                            | X5R, B | X7Δ, R                                                                                                        | X5R, B | X7R, R | X6S | X5R, B | X6S | X5R, B | X6S | X5R, B | X6S | X5R, B  | X6S | X5R, B | X6S | X5R, B | X6S | X5R, B |
| 100pF               |                    | p80     | p80 | p80    | p80    |     |     |     | p81 | p81 |     | p81     |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 150pF               |                    | p80     | p80 | p80    | p80    |     |     |     | p81 | p81 |     | p81     |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 220pF               |                    | p80     | p80 | p80    | p80    |     |     |     | p81 | p81 |     | p81     |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 330pF               |                    | p80     | p80 | p80    | p80    |     |     |     | p81 | p81 |     | p81     |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 470pF               |                    | p80     | p80 | p80    | p80    |     |     |     | p81 | p81 |     | p81     |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 680pF               |                    |         | p80 | p80    | p80    |     |     |     | p81 | p81 |     | p81     |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 820pF               |                    |         | p80 |        |        |     |     |     |     |     |     |         |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 1000pF              |                    | p80     | p80 | p80    | p80    | p80 |     |     | p81 | p81 |     | p81     | p81 |        | p81    |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 1500pF              |                    |         |     | p80    | p80    | p80 | p80 |     | p81 | p81 |     | p81     | p81 |        | p81    |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 2200pF              |                    |         |     | p80    | p80    | p80 | p80 |     |     |     |     | p81     |     | p81    | p81    | p81                            |        | p82                                                                                                           |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 3300pF              |                    |         |     | p80    | p80    | p80 | p80 |     |     |     |     | p81     |     | p81    | p81    | p81                            |        | p82                                                                                                           |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 4700pF              |                    |         |     | p80    | p80    | p80 | p80 |     |     |     |     | p81     |     | p81    | p81    |                                |        | p82                                                                                                           | p82    | p82    | p82 | p82    |     | p82    |     |        |     |         |     |        |     |        |     |        |
| 6800pF              |                    |         |     | p80    | p80    | p80 | p80 |     |     |     |     | p81     |     | p81    | p81    |                                |        | p82                                                                                                           | p82    | p82    | p82 | p82    |     | p82    |     |        |     |         |     |        |     |        |     |        |
| 10000pF             |                    |         |     | p80    | p80    | p80 | p80 |     |     |     |     | p81     |     | p81    | p81    |                                |        | p81                                                                                                           | p82    | p82    | p82 |        | p82 | p82    |     |        |     |         |     |        |     |        |     |        |
| 15000pF             |                    |         |     |        | p80    |     | p80 |     |     |     |     |         |     |        |        |                                |        | p81                                                                                                           | p82    |        | p82 | p82    |     | p82    | p82 |        |     |         |     |        |     |        |     |        |
| 22000pF             |                    |         |     |        | p80    |     | p80 |     |     |     |     |         |     |        |        |                                |        | p81                                                                                                           | p82    |        | p82 | p82    |     | p82    | p82 |        |     |         |     |        |     |        |     |        |
| 33000pF             |                    |         |     |        | p80    |     | p81 |     |     |     |     |         |     |        |        |                                |        | p81                                                                                                           | p82    |        | p82 | p82    |     | p82    | p82 |        |     |         |     |        |     |        |     |        |
| 47000pF             |                    |         |     |        | p80    |     | p81 |     |     |     |     |         |     |        |        |                                |        | p82                                                                                                           | p82    |        | p82 | p82    |     | p82    | p82 |        |     |         |     |        |     |        |     |        |
| 68000pF             |                    |         |     |        | p80    |     | p81 |     |     |     |     |         |     |        |        |                                |        | p82                                                                                                           | p82    |        | p82 | p82    |     | p82    | p82 |        |     |         |     |        |     |        |     |        |
| 0.10μF              |                    |         |     |        | p80    | p80 | p81 | p81 |     |     | p81 |         | p81 | p81    | p81    | p81                            | p82    | p82                                                                                                           | p82    | p82    | p82 |        | p82 |        |     | p82    | p83 | p83     | p83 | p83    | p83 | p83    | p83 | p83    |
| 0.15μF              |                    |         |     |        |        |     |     |     |     |     |     |         |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 0.22μF              |                    |         |     |        |        |     |     |     |     |     |     |         |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 0.33μF              |                    |         |     |        |        |     |     |     |     |     |     |         |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 0.47μF              |                    |         |     |        |        |     |     |     |     |     |     |         |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 0.68μF              |                    |         |     |        |        |     |     |     |     |     |     |         |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 1.0μF               |                    |         |     |        |        |     |     |     |     |     |     |         |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 2.2μF               |                    |         |     |        |        |     |     |     |     |     |     |         |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 4.7μF               |                    |         |     |        |        |     |     |     |     |     |     |         |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 10μF                |                    |         |     |        |        |     |     |     |     |     |     |         |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 22μF                |                    |         |     |        |        |     |     |     |     |     |     |         |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 47μF                |                    |         |     |        |        |     |     |     |     |     |     |         |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 100μF               |                    |         |     |        |        |     |     |     |     |     |     |         |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 150μF               |                    |         |     |        |        |     |     |     |     |     |     |         |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |
| 220μF               |                    |         |     |        |        |     |     |     |     |     |     |         |     |        |        |                                |        |                                                                                                               |        |        |     |        |     |        |     |        |     |         |     |        |     |        |     |        |

Continued on the following page. ↗

## Capacitance Table

p00 Each number in the Part Number List refers to the page number printed at the bottom of the page.

(→ GRM Series High Dielectric Constant Type)

| p00 ← Part Number List |  | JIS: <div>R</div> <div>B</div> |     | EIA: <div>X7R</div> <div>X7S</div> <div>X7T</div> <div>X7U</div> <div>X6S</div> <div>X6T</div> <div>X5R</div> |     |     |     |     |     |      |        |     |        |     |     |        |     |        |     |     |        |     |        |        |     |        |     |     |     |
|------------------------|--|--------------------------------|-----|---------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|-----|------|--------|-----|--------|-----|-----|--------|-----|--------|-----|-----|--------|-----|--------|--------|-----|--------|-----|-----|-----|
| L×W (mm)               |  | 1.0×0.5                        |     |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     |        |     |        |     |     |        |     |        |        |     |        |     |     |     |
| T max. (mm)            |  | 0.22                           |     | 0.3                                                                                                           |     |     |     |     |     | 0.33 |        |     |        |     |     | 0.55   |     |        |     |     |        |     |        |        |     |        |     |     |     |
| Rated Voltage (Vdc)    |  | 2.5                            |     | 50                                                                                                            |     | 25  |     | 16  |     | 10   |        | 10  |        | 6.3 |     | 4      |     | 100    |     | 50  |        | 35  |        | 25     |     | 16     |     | 10  |     |
| Cap. / TC Code         |  | X5R                            | X7T | X7R, R                                                                                                        | B   | X7R | B   | X7R | B   | X5R  | X5R, B | X6T | X5R, B | X6T | X7R | X7R, R | X6S | X5R, B | X6S | X5R | X7R, R | X6S | X5R, B | X7R, R | X6S | X5R, B | X7R | X6S |     |
| 100pF                  |  |                                |     |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     |        |     |        |     |     |        |     |        |        |     |        |     |     |     |
| 150pF                  |  |                                |     |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     |        |     |        |     |     |        |     |        |        |     |        |     |     |     |
| 220pF                  |  |                                |     | p83p83                                                                                                        | p83 |     |     |     |     |      |        |     |        |     | p83 | p83    | p84 |        |     | p84 |        |     |        |        |     |        |     |     |     |
| 330pF                  |  |                                |     | p83p83                                                                                                        | p83 |     |     |     |     |      |        |     |        |     | p83 | p83    | p84 |        |     | p84 |        |     |        |        |     |        |     |     |     |
| 470pF                  |  |                                |     | p83p83                                                                                                        | p83 |     |     |     |     |      |        |     |        |     | p83 | p83    | p84 |        |     | p84 |        |     |        |        |     |        |     |     |     |
| 680pF                  |  |                                |     | p83p83                                                                                                        | p83 |     |     |     |     |      |        |     |        |     | p83 | p83    | p84 |        |     | p84 |        |     |        |        |     |        |     |     |     |
| 820pF                  |  |                                |     |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     |        |     |        |     |     |        |     |        |        |     |        |     |     |     |
| 1000pF                 |  |                                |     | p83p83                                                                                                        | p83 |     |     |     |     |      |        |     |        |     | p83 | p83    | p84 |        |     | p84 |        |     |        |        |     |        |     |     |     |
| 1500pF                 |  |                                |     | p83p83                                                                                                        | p83 |     |     |     |     |      |        |     |        |     | p83 | p83    | p84 |        |     | p84 |        |     |        |        |     |        |     |     |     |
| 2200pF                 |  |                                |     |                                                                                                               |     | p83 | p83 |     |     |      |        |     |        |     | p83 | p83    | p84 |        |     | p84 |        |     | p84    |        |     |        |     |     |     |
| 3300pF                 |  |                                |     |                                                                                                               |     |     |     | p83 | p83 |      |        |     |        |     | p83 | p83    | p84 |        |     | p84 |        |     |        |        |     |        |     |     |     |
| 4700pF                 |  |                                |     |                                                                                                               |     |     |     | p83 | p83 |      |        |     |        |     | p83 | p84    | p84 |        |     | p84 |        |     |        |        |     | p85    |     |     |     |
| 6800pF                 |  |                                |     |                                                                                                               |     |     |     | p83 | p83 |      |        |     |        |     |     | p84    | p84 |        |     | p84 |        |     | p84    |        |     |        |     |     |     |
| 10000pF                |  |                                |     |                                                                                                               |     |     |     | p83 | p83 |      |        |     |        |     |     | p84    | p84 |        |     | p84 |        |     | p84    | p84    | p84 | p85    |     | p85 |     |
| 15000pF                |  |                                |     |                                                                                                               |     |     |     |     |     | p83  |        |     |        |     |     | p84    |     |        |     | p84 |        |     | p84    | p84    |     |        |     |     |     |
| 22000pF                |  |                                |     |                                                                                                               |     |     |     |     |     | p83  |        |     |        |     |     | p84    |     |        |     | p84 |        |     | p84    | p84    |     |        |     |     |     |
| 33000pF                |  |                                |     |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     | p84    | p84 |        |     | p84 |        |     | p84    | p84    |     |        |     |     |     |
| 47000pF                |  |                                |     |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     | p84    | p84 |        |     | p84 |        |     | p84    | p84    |     |        |     |     |     |
| 68000pF                |  |                                |     |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     | p84    | p84 |        |     | p84 |        |     | p84    | p84    |     | p85    |     |     |     |
| 0.10μF                 |  |                                | p83 |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     | p84    |     | p84    | p84 |     |        | p84 |        | p84    | p85 |        |     |     |     |
| 0.15μF                 |  |                                |     |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     |        |     |        |     |     |        |     |        |        |     | p85    |     |     |     |
| 0.22μF                 |  |                                | p83 |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     |        |     |        |     | p84 | p84    |     | p84    | p84    | p85 |        | p85 | p85 |     |
| 0.33μF                 |  |                                |     |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     |        |     |        |     |     |        |     |        |        |     |        |     |     |     |
| 0.47μF                 |  |                                |     |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     |        |     |        |     | p84 |        |     | p84    |        |     | p85    | p85 | p85 |     |
| 0.68μF                 |  |                                |     |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     |        |     |        |     |     |        |     |        |        |     |        |     |     |     |
| 1.0μF                  |  | p83                            |     |                                                                                                               |     |     |     |     |     |      | p83    | p83 | p83    | p83 | p83 |        |     |        |     |     |        |     | p84    | p85    |     | p85    | p85 |     | p85 |
| 2.2μF                  |  |                                |     |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     |        |     |        |     |     |        |     |        |        |     |        |     |     |     |
| 4.7μF                  |  |                                |     |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     |        |     |        |     |     |        |     |        |        |     |        |     |     |     |
| 10μF                   |  |                                |     |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     |        |     |        |     |     |        |     |        |        |     |        |     |     |     |
| 22μF                   |  |                                |     |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     |        |     |        |     |     |        |     |        |        |     |        |     |     |     |
| 47μF                   |  |                                |     |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     |        |     |        |     |     |        |     |        |        |     |        |     |     |     |
| 100μF                  |  |                                |     |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     |        |     |        |     |     |        |     |        |        |     |        |     |     |     |
| 150μF                  |  |                                |     |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     |        |     |        |     |     |        |     |        |        |     |        |     |     |     |
| 220μF                  |  |                                |     |                                                                                                               |     |     |     |     |     |      |        |     |        |     |     |        |     |        |     |     |        |     |        |        |     |        |     |     |     |

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# Capacitance Table

p00 Each number in the Part Number List refers to the page number printed at the bottom of the page.

(→ GRM Series High Dielectric Constant Type)

|                     |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
|---------------------|--------------------|---------|-----|-----|--------|-----|-----|-----|-----|-----|--------------------------------|--------|---------------------------------------------------------------------------------------------------------------|------|-----|-----|-----|-----|-----|-----|-----|---------|-----|-----|-----|--------|--------|-----|-----|--|
| p00                 | ← Part Number List |         |     |     |        |     |     |     |     |     | JIS: <div>R</div> <div>B</div> |        | EIA: <div>X7R</div> <div>X7S</div> <div>X7T</div> <div>X7U</div> <div>X6S</div> <div>X6T</div> <div>X5R</div> |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| L×W (mm)            |                    | 1.0×0.5 |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     | 1.6×0.8 |     |     |     |        |        |     |     |  |
| T max. (mm)         |                    | 0.55    |     |     |        |     |     | 0.6 |     |     |                                |        |                                                                                                               | 0.65 |     | 0.7 |     |     |     |     |     | 0.5     |     |     |     |        |        |     |     |  |
| Rated Voltage (Vdc) |                    | 10      | 6.3 |     | 4      |     | 35  | 25  | 16  | 6.3 | 4                              | 2.5    | 10                                                                                                            | 6.3  | 25  | 16  | 10  | 6.3 | 4   | 2.5 | 25  | 16      | 6.3 | 4   |     |        |        |     |     |  |
| Cap. / TC Code      |                    | X5R, B  | X7R | X6S | X5R, B | X7R | X6S | X5R | X5R | X6S | X6S                            | X5R, B | X5R, B                                                                                                        | X6T  | X5R | X6S | X5R | X6S | X5R | X6S | X7S | X6S     | X7S | X5R | X5R | X5R, B | X5R, B | X5R | X5R |  |
| 100pF               |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 150pF               |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 220pF               |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 330pF               |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 470pF               |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 680pF               |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 820pF               |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 1000pF              |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 1500pF              |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 2200pF              |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 3300pF              |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 4700pF              |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 6800pF              |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 10000pF             |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 15000pF             |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 22000pF             |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 33000pF             |                    | p85     |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 47000pF             |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 68000pF             |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 0.10μF              |                    | p85     |     |     | p85    |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 0.15μF              |                    | p85     | p85 |     | p85    | p85 |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 0.22μF              |                    | p85     | p85 | p85 | p85    | p85 | p85 |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 0.33μF              |                    | p85     | p85 |     | p85    | p85 |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 0.47μF              |                    | p85     | p85 |     | p85    | p85 |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 0.68μF              |                    | p85     | p85 |     | p85    | p85 |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 1.0μF               |                    | p85     | p85 | p85 | p85    | p85 |     | p85 | p85 | p85 | p85                            |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     | p86    | p86    | p86 | p86 |  |
| 2.2μF               |                    | p85     |     | p85 | p85    |     |     |     |     |     |                                |        |                                                                                                               |      |     | p86 | p86 | p86 | p86 | p86 | p86 |         |     |     |     |        |        |     |     |  |
| 4.7μF               |                    |         |     |     |        |     |     |     |     |     |                                | p85    | p85                                                                                                           | p85  | p85 | p86 | p86 | p86 |     |     |     |         |     |     |     |        |        |     |     |  |
| 10μF                |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     | p86 | p86 |        |        | p86 | p86 |  |
| 22μF                |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 47μF                |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 100μF               |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 150μF               |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |
| 220μF               |                    |         |     |     |        |     |     |     |     |     |                                |        |                                                                                                               |      |     |     |     |     |     |     |     |         |     |     |     |        |        |     |     |  |

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# Capacitance Table

p00 Each number in the Part Number List refers to the page number printed at the bottom of the page.

(→ GRM Series High Dielectric Constant Type)

| p00                 | ← Part Number List                                                                                                                                             |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|--------|-----|-----|--------|-----|------|--------|-----|-----|
|                     | JIS: <span>R</span> <span>B</span> EIA: <span>X7R</span> <span>X7S</span> <span>X7T</span> <span>X7U</span> <span>X6S</span> <span>X6T</span> <span>X5R</span> |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| L×W (mm)            | 1.6×0.8                                                                                                                                                        |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| T max. (mm)         | 0.55                                                                                                                                                           |     |     |     | 0.9 |     |     |        |     |     |        |     | 0.95 |        |     |     |
| Rated Voltage (Vdc) | 16                                                                                                                                                             | 10  | 6.3 | 250 | 200 | 50  | 35  | 25     | 16  | 10  | 6.3    | 4   | 25   | 16     | 10  | 50  |
| Cap. / TC Code      | X5R                                                                                                                                                            | X6S | X5R | X7T | X6S | X7R | X7R | X5R, B | X7R | X7R | X5R, B | X7R | X6S  | X5R, B | X7R | X5R |
|                     | X5R                                                                                                                                                            | X6S | X5R | X7T | X6S | X7R | X7R | X5R, B | X7R | X7R | X5R, B | X7R | X6S  | X5R, B | X7R | X5R |
| 100pF               |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 150pF               |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 220pF               |                                                                                                                                                                |     |     |     |     | p86 | p86 |        |     |     |        |     |      |        |     |     |
| 330pF               |                                                                                                                                                                |     |     |     |     | p86 | p86 |        |     |     |        |     |      |        |     |     |
| 470pF               |                                                                                                                                                                |     |     |     |     | p86 | p86 |        |     |     |        |     |      |        |     |     |
| 680pF               |                                                                                                                                                                |     |     |     |     | p86 | p86 |        |     |     |        |     |      |        |     |     |
| 820pF               |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 1000pF              |                                                                                                                                                                |     |     |     |     | p86 | p86 |        |     |     |        |     |      |        |     |     |
| 1500pF              |                                                                                                                                                                |     |     |     |     | p86 | p86 |        |     |     |        |     |      |        |     |     |
| 2200pF              |                                                                                                                                                                |     |     |     |     | p86 | p86 |        |     |     |        |     |      |        |     |     |
| 3300pF              |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 4700pF              |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 6800pF              |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 10000pF             |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 15000pF             |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 22000pF             |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 33000pF             |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 47000pF             |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 68000pF             |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 0.10μF              |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 0.15μF              |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 0.22μF              |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 0.33μF              |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 0.47μF              |                                                                                                                                                                |     |     |     |     |     | p86 |        |     |     |        |     |      |        |     |     |
| 0.68μF              |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 1.0μF               |                                                                                                                                                                |     |     |     |     | p86 | p86 |        | p86 | p86 | p86    |     | p86  | p86    |     |     |
| 2.2μF               |                                                                                                                                                                |     |     |     |     |     |     |        | p86 | p86 | p86    |     |      |        |     |     |
| 4.7μF               | p86                                                                                                                                                            | p86 | p86 | p86 | p86 |     |     |        |     |     |        |     | p86  | p86    | p86 | p86 |
| 10μF                |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     | p86  | p86    | p86 | p86 |
| 22μF                |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 47μF                |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 100μF               |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 150μF               |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |
| 220μF               |                                                                                                                                                                |     |     |     |     |     |     |        |     |     |        |     |      |        |     |     |

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## Capacitance Table

p00 Each number in the Part Number List refers to the page number printed at the bottom of the page.

(→ GRM Series High Dielectric Constant Type)

|                     |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
|---------------------|--------------------|-----|-----|-----|-----|-----|-----|--------|-----|--------|------|----------|------|------|-----|-----|--------|-----|--------|-----|--------|-----|--------|-----|-----|-----|-----|-----|
| p00                 | ← Part Number List |     |     |     |     |     |     |        |     |        | JIS: | R        | B    | EIA: | X7R | X7S | X7T    | X7U | X6S    | X6T | X5R    |     |        |     |     |     |     |     |
| L×W (mm)            | 1.6×0.8            |     |     |     |     |     |     |        |     |        |      | 2.0×1.25 |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| T max. (mm)         | 1.0                |     |     |     |     |     |     |        |     |        |      | 0.7      | 0.95 |      |     |     |        |     |        |     |        |     |        |     |     | 1.0 |     |     |
| Rated Voltage (Vdc) | 25                 |     |     | 16  |     |     | 10  | 6.3    | 4   |        |      | 16       | 50   | 35   | 25  |     |        | 16  |        |     | 10     |     | 6.3    |     | 4   |     | 2.5 | 500 |
| Cap. / TC Code      | X7S                | X6S | X5R | X7S | X6S | X7T | X7T | X5R, B | X6S | X5R, B | X6S  | X5R, B   | X6S  | X5R  | X7R | X6S | X5R, B | X7R | X5R, B | X7Δ | X5R, B | X6S | X5R, B | X6S | X5R | X6T | X7R |     |
| 100pF               |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 150pF               |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 220pF               |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 330pF               |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 470pF               |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 680pF               |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 820pF               |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 1000pF              |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     | p87 |     |
| 1500pF              |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     | p87 |     |
| 2200pF              |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     | p87 |     |
| 3300pF              |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     | p87 |     |
| 4700pF              |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     | p87 |     |
| 6800pF              |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     | p87 |     |
| 10000pF             |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 15000pF             |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 22000pF             |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 33000pF             |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 47000pF             |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 68000pF             |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 0.10μF              |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 0.15μF              |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 0.22μF              |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 0.33μF              |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 0.47μF              |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 0.68μF              |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 1.0μF               |                    |     |     |     |     |     |     |        |     |        |      | p87      | p87  | p87  |     | p87 |        |     |        |     |        |     |        |     |     |     |     |     |
| 2.2μF               | p87                | p87 |     | p87 |     |     |     |        |     |        |      |          | p87  | p87  | p87 |     | p87    | p87 | p87    |     | p87    |     |        |     |     |     |     |     |
| 4.7μF               |                    | p87 |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     | p87    |     |        |     |        |     |     |     |     |     |
| 10μF                |                    |     | p87 |     |     | p87 | p87 | p87    |     |        |      |          |      |      |     |     |        |     | p87    | p87 |        | p87 |        |     |     |     |     |     |
| 22μF                |                    |     |     |     |     |     |     | p87    | p87 | p87    | p87  | p87      |      |      |     |     |        |     | p87    | p87 |        |     |        |     |     |     |     |     |
| 47μF                |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 100μF               |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 150μF               |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |
| 220μF               |                    |     |     |     |     |     |     |        |     |        |      |          |      |      |     |     |        |     |        |     |        |     |        |     |     |     |     |     |

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# Capacitance Table

p00 Each number in the Part Number List refers to the page number printed at the bottom of the page.

(→ GRM Series High Dielectric Constant Type)

|                     |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
|---------------------|--------------------|----------|-----|-----|-----|-----|-----|--------|-----|--------|-----|--------|--------|--------|--------|------|-----|-----|-----|------|-----|------|-----|-----|-----|-----|-----|-----|
| p00                 | ← Part Number List |          |     |     |     |     |     |        |     |        |     |        |        |        |        | JIS: |     | R   | B   | EIA: |     | X7R  | X7S | X7T | X7U | X6S | X6T | X5R |
| L×W (mm)            |                    | 2.0×1.25 |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| T max. (mm)         |                    | 1.0      |     |     |     |     |     | 1.35   |     |        |     |        |        | 1.4    |        |      |     |     |     |      |     | 1.45 |     |     |     |     |     |     |
| Rated Voltage (Vdc) |                    | 250      | 200 | 35  | 25  | 16  |     | 50     | 25  | 16     |     | 50     | 25     | 16     | 10     | 6.3  | 4   | 500 | 250 | 200  | 50  |      |     |     |     |     |     |     |
| Cap. / TC Code      |                    | X7R      | X7R | X6S | X7S | X6S | X7S | X5R, B | X6S | X5R, B | X7R | X5R, B | X5R, B | X7R, R | X5R, B | X7R  | X6S | X7R | B   | X7R  | X6S | X7U  | X6S | X7R | X7R | X7R | X7S |     |
| 100pF               |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 150pF               |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 220pF               |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 330pF               |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 470pF               |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 680pF               |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 820pF               |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 1000pF              |                    | p87      | p87 |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 1500pF              |                    | p87      | p87 |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 2200pF              |                    | p87      | p87 |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 3300pF              |                    | p87      | p87 |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 4700pF              |                    | p87      | p87 |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 6800pF              |                    | p87      | p87 |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 10000pF             |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     | p88 | p88 | p88 |     |     |
| 15000pF             |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     | p88 | p88 |     |     |
| 22000pF             |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     | p88 | p88 |     |     |
| 33000pF             |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 47000pF             |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 68000pF             |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 0.10μF              |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 0.15μF              |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 0.22μF              |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 0.33μF              |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 0.47μF              |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 0.68μF              |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 1.0μF               |                    |          |     |     |     |     |     | p87    | p87 |        |     |        |        | p88    | p88    |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 2.2μF               |                    |          |     |     |     |     |     |        | p87 | p88    |     |        | p88    | p88    | p88    |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 4.7μF               |                    |          | p87 | p87 | p87 | p87 |     |        | p87 | p87    | p87 |        | p88    | p88    | p88    |      | p88 | p88 |     |      |     |      |     |     |     |     | p88 |     |
| 10μF                |                    |          |     |     |     |     |     |        |     |        |     | p88    | p88    |        | p88    |      | p88 | p88 |     |      |     |      |     |     |     |     |     |     |
| 22μF                |                    |          |     |     |     |     | p87 |        |     |        |     |        |        |        |        |      |     |     | p88 |      |     |      |     |     |     |     |     |     |
| 47μF                |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     | p88  |     | p88  | p88 | p88 |     |     |     |     |
| 100μF               |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 150μF               |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |
| 220μF               |                    |          |     |     |     |     |     |        |     |        |     |        |        |        |        |      |     |     |     |      |     |      |     |     |     |     |     |     |

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# Capacitance Table

p00 Each number in the Part Number List refers to the page number printed at the bottom of the page.

(→ GRM Series High Dielectric Constant Type)

|                     |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |
|---------------------|--------------------|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------------------------------|-----|---------------------------------------------------------------------------------------------------------------|-----|---------|--------|-----|--------|-----|------|-----|-----|------|-----|-----|
| p00                 | ← Part Number List |          |     |     |     |     |     |     |     |     |     |     |     |     |     | JIS: <div>R</div> <div>B</div> |     | EIA: <div>X7R</div> <div>X7S</div> <div>X7T</div> <div>X7U</div> <div>X6S</div> <div>X6T</div> <div>X5R</div> |     |         |        |     |        |     |      |     |     |      |     |     |
| L×W (mm)            |                    | 2.0×1.25 |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     | 3.2×1.6 |        |     |        |     |      |     |     |      |     |     |
| T max. (mm)         |                    | 1.45     |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     | 0.95    |        |     |        | 1.0 | 1.25 |     |     |      |     |     |
| Rated Voltage (Vdc) |                    | 50       | 35  |     |     |     | 25  |     |     |     | 16  |     |     |     | 10  |                                |     |                                                                                                               | 6.3 |         | 4      | 2.5 | 35     | 16  | 10   | 6.3 | 630 | 1000 | 630 | 500 |
| Cap. / TC Code      |                    | X6S      | X7S | X6S | X5R | X7S | X6S | X5R | X7S | X6S | X5R | X7T | X6S | X5R | X7T | X5R, B                         | X6S | X5R, B                                                                                                        | X6S | X5R     | X5R, B | X6S | X5R, B | X7R | X7R  | X7R | X7R |      |     |     |
| 100pF               |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |
| 150pF               |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |
| 220pF               |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |
| 330pF               |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |
| 470pF               |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |
| 680pF               |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     | p88 |      |     |     |
| 820pF               |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     | p88 |      |     |     |
| 1000pF              |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     | p88 |      |     |     |
| 1500pF              |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     | p88 |      |     |     |
| 2200pF              |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     | p88 |      |     |     |
| 3300pF              |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     | p88 |      |     |     |
| 4700pF              |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     | p88 |      |     |     |
| 6800pF              |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     | p88 |      |     |     |
| 10000pF             |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     | p88 |      |     |     |
| 15000pF             |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |
| 22000pF             |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     | p89 |      |     |     |
| 33000pF             |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     | p89 |      |     |     |
| 47000pF             |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |
| 68000pF             |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |
| 0.10μF              |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |
| 0.15μF              |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |
| 0.22μF              |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |
| 0.33μF              |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |
| 0.47μF              |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |
| 0.68μF              |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |
| 1.0μF               |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |
| 2.2μF               |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |
| 4.7μF               |                    | p88      | p88 |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |
| 10μF                |                    |          |     | p88 | p88 | p88 |     | p88 |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         | p88    | p88 | p88    |     |      |     |     |      |     |     |
| 22μF                |                    |          |     |     |     |     |     |     | p88 |     | p88 | p88 | p88 | p88 | p88 |                                |     |                                                                                                               |     |         | p88    | p88 | p88    | p88 | p88  | p88 | p88 |      |     |     |
| 47μF                |                    |          |     |     |     |     |     |     |     |     |     |     |     | p88 |     | p88                            | p88 | p88                                                                                                           |     |         |        |     |        |     |      |     |     |      |     |     |
| 100μF               |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     | p88                            | p88 |                                                                                                               |     | p88     |        |     |        |     |      |     |     |      |     |     |
| 150μF               |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |
| 220μF               |                    |          |     |     |     |     |     |     |     |     |     |     |     |     |     |                                |     |                                                                                                               |     |         |        |     |        |     |      |     |     |      |     |     |

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# Capacitance Table

p00 Each number in the Part Number List refers to the page number printed at the bottom of the page.

(→ GRM Series High Dielectric Constant Type)

|                     |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
|---------------------|--------------------|-----|-----|-----|------|-----|-----|------|-----|-----|-----|-------|-----|-------|-----|-----|-------|-----|-------|-----|-----|-------|-----|-----|-----|-----|
| p00                 | ← Part Number List |     |     |     | JIS: | R   | B   | EIA: | X7R | X7S | X7T | X7U   | X6S | X6T   | X5R |     |       |     |       |     |     |       |     |     |     |     |
| L×W (mm)            | 3.2×1.6            |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| T max. (mm)         | 1.25               |     |     |     |      | 1.8 |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     | 1.9   |     |     |     |     |
| Rated Voltage (Vdc) | 250                | 200 | 50  | 25  | 1000 | 630 | 500 | 250  | 200 | 100 | 50  | 25    | 16  | 10    | 6.3 | 4   | 100   | 25  |       |     |     |       |     |     |     |     |
| Cap. / TC Code      | X7R                | X7R | X7R | B   | X5R  | X7R | X7R | X7R  | X7R | X7R | X7R | X5R,B | X7R | X5R,B | X7R | X6S | X5R,B | X7R | X5R,B | X7Δ | X6S | X5R,B | X7U | X6S | X7R | X6S |
| 100pF               |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 150pF               |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 220pF               |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 330pF               |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 470pF               |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 680pF               |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 820pF               |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 1000pF              |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 1500pF              |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 2200pF              |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 3300pF              |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 4700pF              |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 6800pF              |                    |     |     |     |      | p89 |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 10000pF             |                    |     |     |     |      | p89 |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 15000pF             | p89                | p89 |     |     |      |     | p89 |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 22000pF             | p89                | p89 |     |     |      |     | p89 |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 33000pF             |                    |     |     |     |      |     |     | p89  | p89 | p89 |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 47000pF             |                    |     |     |     |      |     |     | p89  | p89 | p89 |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 68000pF             | p89                | p89 |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 0.10μF              |                    |     |     |     |      |     |     |      | p89 | p89 |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 0.15μF              |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 0.22μF              |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 0.33μF              |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 0.47μF              |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 0.68μF              |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 1.0μF               |                    |     | p89 | p89 |      |     |     |      |     | p89 |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 2.2μF               |                    |     |     |     |      |     |     |      |     |     | p89 | p89   |     |       |     |     |       |     |       |     |     |       |     |     | p89 |     |
| 4.7μF               |                    |     |     |     |      |     |     |      |     |     | p89 | p89   | p89 |       | p89 |     |       |     |       |     |     |       |     |     |     |     |
| 10μF                |                    |     |     |     | p89  |     |     |      |     |     |     | p89   | p89 | p89   |     |     |       |     |       |     |     |       |     |     |     |     |
| 22μF                |                    |     |     |     |      |     |     |      |     |     |     |       | p89 | p89   |     |     | p89   | p89 | p89   |     |     |       |     |     |     |     |
| 47μF                |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     | p89 | p89   | p89 | p89   |     |     |       |     |     |     |     |
| 100μF               |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       | p89 | p89 | p89   | p89 | p89 | p89 |     |
| 150μF               |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |
| 220μF               |                    |     |     |     |      |     |     |      |     |     |     |       |     |       |     |     |       |     |       |     |     |       |     |     |     |     |

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# Capacitance Table

**p00** Each number in the Part Number List refers to the page number printed at the bottom of the page.

(→ GRM Series High Dielectric Constant Type)

|                     |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
|---------------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|--------------------------------|-----|---------------------------------------------------------------------------------------------------------------|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| p00                 | ← Part Number List |     |     |     |     |     |     |     |     |      | JIS: <div>R</div> <div>B</div> |     | EIA: <div>X7R</div> <div>X7S</div> <div>X7T</div> <div>X7U</div> <div>X6S</div> <div>X6T</div> <div>X5R</div> |     |     |      |     |     |     |     |     |     |     |     |     |     |
| L×W (mm)            | 3.2×1.6            |     |     |     |     |     |     |     |     |      | 3.2×2.5                        |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| T max. (mm)         | 1.9                |     |     |     |     |     |     |     |     |      | 1.5                            |     |                                                                                                               |     |     | 1.8  | 2.0 |     |     |     |     | 2.2 |     | 2.7 |     |     |
| Rated Voltage (Vdc) | 16                 | 10  | 6.3 | 4   |     |     | 2.5 |     |     | 1000 | 630                            | 500 | 250                                                                                                           | 200 | 100 | 1000 | 630 | 500 | 250 | 200 | 100 | 25  | 100 | 80  | 63  | 50  |
| Cap. / TC Code      | X7S                | X5R | X6S | X6T | X5R | X7U | X6Δ | X5R | X6S | X5R  | X7R                            | X7R | X7R                                                                                                           | X7R | X7R | X7R  | X7R | X7R | X7R | X7R | X7S | X7R | X7R | X7R | X7R | X7R |
| 100pF               |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 150pF               |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 220pF               |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 330pF               |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 470pF               |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 680pF               |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 820pF               |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 1000pF              |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 1500pF              |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 2200pF              |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 3300pF              |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 4700pF              |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 6800pF              |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 10000pF             |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 15000pF             |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 22000pF             |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 33000pF             |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 47000pF             |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 68000pF             |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 0.10μF              |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 0.15μF              |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 0.22μF              |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 0.33μF              |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 0.47μF              |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 0.68μF              |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 1.0μF               |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 2.2μF               |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 4.7μF               |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 10μF                |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 22μF                |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 47μF                |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 100μF               |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 150μF               |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |
| 220μF               |                    |     |     |     |     |     |     |     |     |      |                                |     |                                                                                                               |     |     |      |     |     |     |     |     |     |     |     |     |     |

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# Capacitance Table

p00 Each number in the Part Number List refers to the page number printed at the bottom of the page.

(→ GRM Series High Dielectric Constant Type)

|                     |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
|---------------------|--------------------|-----|--------------------------------|-----|---------------------------------------------------------------------------------------------------------------|-----|-----|--------|-----|--------|-----|--------|-----|---------|-----|-----|-----|-----|------|-----|-----|---------|-----|------|-----|-----|-----|-----|--|
| p00                 | ← Part Number List |     | JIS: <div>R</div> <div>B</div> |     | EIA: <div>X7R</div> <div>X7S</div> <div>X7T</div> <div>X7U</div> <div>X6S</div> <div>X6T</div> <div>X5R</div> |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| L×W (mm)            | 3.2×2.5            |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     | 4.5×3.2 |     |     |     |     |      |     |     | 5.7×5.0 |     |      |     |     |     |     |  |
| T max. (mm)         | 2.7                |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     | 1.5     |     |     |     | 2.0 |      |     |     | 2.0     |     |      |     |     |     |     |  |
| Rated Voltage (Vdc) | 50                 | 35  |                                | 25  |                                                                                                               | 16  |     |        | 10  |        |     | 6.3    |     | 4       | 630 | 500 | 250 | 200 | 1000 | 630 | 500 | 250     | 200 | 1000 | 630 | 500 | 250 | 200 |  |
| Cap. / TC Code      | X5R, B             | X7R | X5R, B                         | X7R | X5R, B                                                                                                        | X7R | X6S | X5R, B | X7R | X5R, B | X7Δ | X5R, B | X7U | X7R     | X7R | X7R | X7R | X7R | X7R  | X7R | X7R | X7R     | X7R | X7R  | X7R | X7R | X7R | X7R |  |
| 100pF               |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 150pF               |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 220pF               |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 330pF               |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 470pF               |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 680pF               |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 820pF               |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 1000pF              |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 1500pF              |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 2200pF              |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 3300pF              |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 4700pF              |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 6800pF              |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 10000pF             |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 15000pF             |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 22000pF             |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 33000pF             |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 47000pF             |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 68000pF             |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 0.10μF              |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 0.15μF              |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 0.22μF              |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 0.33μF              |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 0.47μF              |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 0.68μF              |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 1.0μF               |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 2.2μF               |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 4.7μF               |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 10μF                | p90                | p90 | p90                            | p90 | p90                                                                                                           |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 22μF                |                    |     |                                |     |                                                                                                               | p90 | p90 | p90    | p90 |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 47μF                |                    |     |                                |     |                                                                                                               |     | p90 | p90    | p90 | p90    | p90 | p90    |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 100μF               |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        | p90 | p90     | p90 | p90 |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 150μF               |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |
| 220μF               |                    |     |                                |     |                                                                                                               |     |     |        |     |        |     |        |     |         |     |     |     |     |      |     |     |         |     |      |     |     |     |     |  |

## Capacitance Table

p00 Each number in the Part Number List refers to the page number printed at the bottom of the page.

### GJM Series Temperature Compensating Type

| p00                 | ← Part Number List |     | JIS:    | CK  | CJ  | CH  | EIA:      | COG       |
|---------------------|--------------------|-----|---------|-----|-----|-----|-----------|-----------|
| L×W (mm)            | 0.4×0.2            |     | 0.6×0.3 |     |     |     | 1.0×0.5   |           |
| T max. (mm)         | 0.22               |     | 0.33    |     |     |     | 0.55      |           |
| Rated Voltage (Vdc) | 25                 |     | 50      |     |     |     | 25        |           |
| Cap. / TC Code      | COG                | CΔ  | COG     | CK  | CJ  | CH  | COG       | CΔ        |
| 0.10pF              |                    |     |         |     |     |     |           | p105 p109 |
| 0.20pF              | p92                | p95 | p98     | p98 |     | p98 |           | p105 p109 |
| 1.0pF               | p92                | p95 |         | p98 |     |     | p99 p102  | p105 p109 |
| 2.0pF               | p92                | p95 |         | p98 |     |     | p99 p102  | p105 p109 |
| 3.0pF               | p92                | p95 |         |     | p98 |     | p99 p102  | p106 p109 |
| 4.0pF               | p93                | p96 |         |     |     |     | p99 p103  | p106 p110 |
| 5.0pF               | p93                | p96 |         |     |     |     | p100 p103 | p106 p110 |
| 6.0pF               | p93                | p96 |         |     |     |     | p100 p103 | p107 p110 |
| 7.0pF               | p94                | p97 |         |     |     |     | p100 p104 | p107 p111 |
| 8.0pF               | p94                | p97 |         |     |     |     | p101 p104 | p107 p111 |
| 9.0pF               | p94                | p98 |         |     |     |     | p101 p104 | p108 p111 |
| 10pF                | p95                | p98 |         |     |     |     | p102 p105 | p108 p112 |
| 11pF                | p95                | p98 |         |     |     |     | p102 p105 | p108 p112 |
| 12pF                | p95                | p98 |         |     |     |     | p102 p105 | p108 p112 |
| 13pF                | p95                | p98 |         |     |     |     | p102 p105 | p108 p112 |
| 15pF                | p95                | p98 |         |     |     |     | p102 p105 | p108 p112 |
| 16pF                | p95                | p98 |         |     |     |     | p102 p105 | p108 p112 |
| 18pF                | p95                | p98 |         |     |     |     | p102 p105 | p108 p112 |
| 20pF                | p95                | p98 |         |     |     |     | p102 p105 | p108 p112 |
| 22pF                | p95                | p98 |         |     |     |     | p102 p105 | p108 p112 |
| 24pF                |                    |     |         |     |     |     | p102 p105 | p108 p112 |
| 27pF                |                    |     |         |     |     |     | p102 p105 | p108 p112 |
| 30pF                |                    |     |         |     |     |     | p102 p105 | p108 p112 |
| 33pF                |                    |     |         |     |     |     | p102 p105 | p108 p112 |
| 36pF                |                    |     |         |     |     |     |           | p108 p112 |
| 39pF                |                    |     |         |     |     |     |           | p108 p112 |
| 43pF                |                    |     |         |     |     |     |           | p108 p112 |
| 47pF                |                    |     |         |     |     |     |           | p109 p112 |

The indication for every 0.1 pF has been omitted for less than 10 pF. Refer to the Part Number List for details.

## Capacitance Table

**p00** Each number in the Part Number List refers to the page number printed at the bottom of the page.

### GMA Series High Dielectric Constant Type

**p00** ← Part Number List    JIS: **R** **B**    EIA: **X7R** **X5R**

| L×W (mm)            | 0.38×0.38 |      |      | 0.5×0.5 |      |      |      |      |      |      |      | 0.8×0.8 |      |      |      |      |      |      |      |
|---------------------|-----------|------|------|---------|------|------|------|------|------|------|------|---------|------|------|------|------|------|------|------|
| T max. (mm)         | 0.35      |      |      | 0.4     |      |      |      |      |      |      |      | 0.6     |      |      |      |      |      |      |      |
| Rated Voltage (Vdc) | 10        |      |      | 100     | 25   |      | 10   |      | 6.3  |      | 100  | 25      |      | 10   |      | 6.3  |      |      |      |
| Cap. / TC Code      | X7R       | R    | B    | X7R     | X7R  | B    | X7R  | R    | B    | X5R  | B    | X7R     | X7R  | B    | X7R  | R    | B    | X5R  | B    |
| 100pF               |           |      |      | p115    |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |
| 150pF               |           |      |      | p115    |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |
| 220pF               |           |      |      | p115    |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |
| 330pF               |           |      |      | p115    |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |
| 470pF               |           |      |      | p115    |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |
| 680pF               |           |      |      | p115    |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |
| 1000pF              | p115      | p115 | p115 | p115    |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |
| 1500pF              | p115      | p115 | p115 |         | p115 | p115 |      |      |      |      |      | p115    |      |      |      |      |      |      |      |
| 1800pF              | p115      | p115 | p115 |         |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |
| 2200pF              |           |      |      |         | p115 | p115 |      |      |      |      |      | p115    |      |      |      |      |      |      |      |
| 3300pF              |           |      |      |         | p115 | p115 |      |      |      |      |      | p115    |      |      |      |      |      |      |      |
| 4700pF              |           |      |      |         | p115 | p115 |      |      |      |      |      | p115    |      |      |      |      |      |      |      |
| 6800pF              |           |      |      |         |      |      | p115 | p115 | p115 |      |      | p115    |      |      |      |      |      |      |      |
| 10000pF             | p115      | p115 |      |         |      |      | p115 | p115 | p115 |      |      |         | p115 | p115 |      |      |      |      |      |
| 15000pF             |           |      |      |         |      |      | p115 | p115 | p115 |      |      |         | p115 | p115 |      |      |      |      |      |
| 22000pF             |           |      |      |         |      |      | p115 | p115 | p115 |      |      |         | p115 | p115 |      |      |      |      |      |
| 33000pF             |           |      |      |         |      |      |      |      |      |      |      |         |      |      | p115 | p115 | p115 |      |      |
| 47000pF             |           |      |      |         |      |      |      |      |      |      |      |         |      |      | p115 | p115 | p115 |      |      |
| 68000pF             |           |      |      |         |      |      |      |      |      |      |      |         |      |      | p115 | p115 | p115 |      |      |
| 0.10μF              |           |      |      |         |      |      |      |      |      | p115 | p115 |         |      |      | p115 | p115 | p115 |      |      |
| 0.47μF              |           |      |      |         |      |      |      |      |      |      |      |         |      |      |      |      |      | p115 | p115 |

## Capacitance Table

p00 Each number in the Part Number List refers to the page number printed at the bottom of the page.

### GMD Series High Dielectric Constant Type

p00 ← Part Number List JIS: R B EIA: X7R X5R

| L×W (mm)            | 0.6×0.3 |      |      |      |      |      |      |      |      |      |      | 1.0×0.5 |      |      |      |      |      |      |      |      |      |      |
|---------------------|---------|------|------|------|------|------|------|------|------|------|------|---------|------|------|------|------|------|------|------|------|------|------|
| T max. (mm)         | 0.33    |      |      |      |      |      |      |      |      |      |      | 0.55    |      |      |      |      |      |      |      |      |      |      |
| Rated Voltage (Vdc) | 25      |      |      | 16   |      |      | 10   |      |      | 6.3  |      | 50      |      |      | 25   |      |      | 16   |      |      | 10   |      |
| Cap. / TC Code      | X7R     | R    | B    | X7R  | R    | B    | X7R  | R    | B    | X5R  | B    | X7R     | R    | B    | X7R  | R    | B    | X7R  | R    | B    | X5R  | B    |
| 100pF               | p117    | p117 | p117 |      |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |      |      |      |
| 120pF               | p117    | p117 | p117 |      |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |      |      |      |
| 150pF               | p117    | p117 | p117 |      |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |      |      |      |
| 180pF               | p117    | p117 | p117 |      |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |      |      |      |
| 220pF               | p117    | p117 | p117 |      |      |      |      |      |      |      |      | p117    | p117 | p118 |      |      |      |      |      |      |      |      |
| 270pF               | p117    | p117 | p117 |      |      |      |      |      |      |      |      | p117    | p118 | p118 |      |      |      |      |      |      |      |      |
| 330pF               | p117    | p117 | p117 |      |      |      |      |      |      |      |      | p117    | p118 | p118 |      |      |      |      |      |      |      |      |
| 390pF               | p117    | p117 | p117 |      |      |      |      |      |      |      |      | p117    | p118 | p118 |      |      |      |      |      |      |      |      |
| 470pF               | p117    | p117 | p117 |      |      |      |      |      |      |      |      | p117    | p118 | p118 |      |      |      |      |      |      |      |      |
| 560pF               | p117    | p117 | p117 |      |      |      |      |      |      |      |      | p117    | p118 | p118 |      |      |      |      |      |      |      |      |
| 680pF               | p117    | p117 | p117 |      |      |      |      |      |      |      |      | p117    | p118 | p118 |      |      |      |      |      |      |      |      |
| 820pF               | p117    | p117 | p117 |      |      |      |      |      |      |      |      | p117    | p118 | p118 |      |      |      |      |      |      |      |      |
| 1000pF              | p117    | p117 | p117 |      |      |      |      |      |      |      |      | p117    | p118 | p118 |      |      |      |      |      |      |      |      |
| 1200pF              | p117    | p117 | p117 |      |      |      |      |      |      |      |      | p117    | p118 | p118 |      |      |      |      |      |      |      |      |
| 1500pF              | p117    | p117 | p117 |      |      |      |      |      |      |      |      | p117    | p118 | p118 |      |      |      |      |      |      |      |      |
| 1800pF              |         |      |      | p117 | p117 | p117 |      |      |      |      |      | p117    | p118 | p118 |      |      |      |      |      |      |      |      |
| 2200pF              |         |      |      | p117 | p117 | p117 |      |      |      |      |      | p117    | p118 | p118 |      |      |      |      |      |      |      |      |
| 2700pF              |         |      |      | p117 | p117 | p117 |      |      |      |      |      | p117    | p118 | p118 |      |      |      |      |      |      |      |      |
| 3300pF              |         |      |      | p117 | p117 | p117 |      |      |      |      |      | p117    | p118 | p118 |      |      |      |      |      |      |      |      |
| 3900pF              |         |      |      |      |      |      | p117 | p117 | p117 |      |      | p117    | p118 | p118 |      |      |      |      |      |      |      |      |
| 4700pF              |         |      |      |      |      |      | p117 | p117 | p117 |      |      | p117    | p118 | p118 |      |      |      |      |      |      |      |      |
| 5600pF              |         |      |      |      |      |      | p117 | p117 | p117 |      |      |         |      |      | p118 | p118 | p118 |      |      |      |      |      |
| 6800pF              |         |      |      |      |      |      | p117 | p117 | p117 |      |      |         |      |      | p118 | p118 | p118 |      |      |      |      |      |
| 8200pF              |         |      |      |      |      |      | p117 | p117 | p117 |      |      |         |      |      | p118 | p118 | p118 |      |      |      |      |      |
| 10000pF             |         |      |      |      |      |      | p117 | p117 | p117 |      |      |         |      |      | p118 | p118 | p118 |      |      |      |      |      |
| 12000pF             |         |      |      |      |      |      |      |      |      |      |      |         |      |      | p118 | p118 | p118 |      |      |      |      |      |
| 15000pF             |         |      |      |      |      |      |      |      |      |      |      |         |      |      | p118 | p118 | p118 |      |      |      |      |      |
| 18000pF             |         |      |      |      |      |      |      |      |      |      |      |         |      |      | p118 | p118 | p118 |      |      |      |      |      |
| 22000pF             |         |      |      |      |      |      |      |      |      |      |      |         |      |      | p118 | p118 | p118 |      |      |      |      |      |
| 27000pF             |         |      |      |      |      |      |      |      |      |      |      |         |      |      | p118 | p118 | p118 |      |      |      |      |      |
| 33000pF             |         |      |      |      |      |      |      |      |      |      |      |         |      |      | p118 | p118 | p118 |      |      |      |      |      |
| 39000pF             |         |      |      |      |      |      |      |      |      |      |      |         |      |      | p118 | p118 | p118 |      |      |      |      |      |
| 47000pF             |         |      |      |      |      |      |      |      |      |      |      |         |      |      | p118 | p118 | p118 |      |      |      |      |      |
| 56000pF             |         |      |      |      |      |      |      |      |      | p117 | p117 |         |      |      |      |      |      | p118 | p118 | p118 |      |      |
| 68000pF             |         |      |      |      |      |      |      |      |      | p117 | p117 |         |      |      |      |      |      | p118 | p118 | p118 |      |      |
| 82000pF             |         |      |      |      |      |      |      |      |      | p117 | p117 |         |      |      |      |      |      | p118 | p118 | p118 |      |      |
| 0.10μF              |         |      |      |      |      |      |      |      |      | p117 | p117 |         |      |      |      |      |      | p118 | p118 | p118 |      |      |
| 0.12μF              |         |      |      |      |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |      | p118 | p118 |
| 0.15μF              |         |      |      |      |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |      | p118 | p118 |
| 0.18μF              |         |      |      |      |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |      | p118 | p118 |
| 0.22μF              |         |      |      |      |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |      | p118 | p118 |
| 0.27μF              |         |      |      |      |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |      | p118 | p118 |
| 0.33μF              |         |      |      |      |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |      | p118 | p118 |
| 0.39μF              |         |      |      |      |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |      | p118 | p118 |
| 0.47μF              |         |      |      |      |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |      | p118 | p118 |

## Capacitance Table

p00 Each number in the Part Number List refers to the page number printed at the bottom of the page.

### GQM Series Temperature Compensating Type

p00 ← Part Number List JIS: CK CJ CH EIA: C0G Murata Temperature Characteristic: X8G

| L×W (mm)            | 1.0×0.5 |      | 1.6×0.8 |      |      |      |      |      | 2.0×1.25 |      |      |      |      |      | 2.8×2.8 |
|---------------------|---------|------|---------|------|------|------|------|------|----------|------|------|------|------|------|---------|
| T max. (mm)         | 0.55    |      | 0.8     | 0.9  |      |      |      | 0.95 |          |      |      | 1.0  |      | 1.35 |         |
| Rated Voltage (Vdc) | 200     | 100  | 250     | 100  |      | 50   |      | 100  |          | 50   |      | 500  | 250  |      | 500     |
| Cap. / TC Code      | C0G     | C0G  | C0G     | C0G  | CΔ   | C0G  | CH   | C0G  | CΔ       | C0G  | CH   | X8G  | C0G  | X8G  | C0G     |
| 0.10pF              | p120    |      |         |      |      |      |      |      |          |      |      |      |      |      |         |
| 1.0pF               | p120    |      | p121    | p121 | p122 |      |      | p124 | p124     |      |      | p126 | p126 | p127 | p128    |
| 2.0pF               | p120    |      | p121    | p122 | p122 |      |      | p124 | p124     |      |      | p126 | p126 | p127 | p128    |
| 3.0pF               | p120    |      | p121    | p122 | p122 |      |      | p124 | p124     |      |      | p126 | p127 | p128 | p128    |
| 4.0pF               | p120    |      | p121    | p122 | p122 |      |      | p124 | p125     |      |      | p126 | p127 | p128 | p128    |
| 5.0pF               | p120    |      | p121    | p122 | p122 |      |      | p124 | p125     |      |      | p126 | p127 | p128 | p128    |
| 6.0pF               | p120    |      | p121    | p122 | p122 |      |      | p124 | p125     |      |      | p126 | p127 | p128 | p128    |
| 7.0pF               | p120    |      | p121    |      |      | p122 | p123 | p124 | p125     |      |      | p126 | p127 | p128 | p129    |
| 8.0pF               | p120    |      | p121    |      |      | p122 | p123 | p124 | p125     |      |      | p126 | p127 | p128 | p129    |
| 9.0pF               | p120    |      | p121    |      |      | p122 | p123 | p124 | p125     |      |      | p126 | p127 | p128 | p129    |
| 10pF                | p120    |      | p121    |      |      | p122 | p123 | p124 | p125     |      |      | p126 | p127 | p128 | p129    |
| 11pF                | p120    |      | p121    |      |      | p122 | p123 | p124 | p125     |      |      | p126 | p127 | p128 | p129    |
| 12pF                | p120    |      | p121    |      |      | p123 | p123 | p124 | p125     |      |      | p126 | p127 | p128 | p129    |
| 13pF                | p120    |      | p121    |      |      | p123 | p123 | p124 | p125     |      |      | p126 | p127 | p128 | p129    |
| 15pF                | p120    |      | p121    |      |      | p123 | p123 | p124 | p125     |      |      | p126 | p127 | p128 | p129    |
| 16pF                | p120    |      | p121    |      |      | p123 | p123 | p124 | p125     |      |      | p126 | p127 | p128 | p129    |
| 18pF                | p120    |      | p121    |      |      | p123 | p123 | p124 | p125     |      |      | p126 | p127 | p128 | p129    |
| 20pF                | p120    |      | p121    |      |      | p123 | p123 |      |          | p125 | p125 | p126 | p127 | p128 | p129    |
| 22pF                | p120    |      | p121    |      |      | p123 | p123 |      |          | p125 | p125 | p126 | p127 | p128 | p129    |
| 24pF                | p120    |      | p121    |      |      | p123 | p123 |      |          | p125 | p125 |      | p127 |      | p129    |
| 27pF                | p120    |      | p121    |      |      | p123 | p123 |      |          | p125 | p125 |      | p127 |      | p129    |
| 30pF                | p120    |      | p121    |      |      | p123 | p123 |      |          | p125 | p125 |      | p127 |      | p129    |
| 33pF                | p120    |      | p121    |      |      | p123 | p123 |      |          | p125 | p125 |      | p127 |      | p129    |
| 36pF                |         | p120 | p121    |      |      | p123 | p123 |      |          | p125 | p125 |      | p127 |      | p129    |
| 39pF                |         | p121 | p121    |      |      | p123 | p123 |      |          | p125 | p125 |      | p127 |      | p129    |
| 43pF                |         | p121 | p121    |      |      | p123 | p123 |      |          | p125 | p125 |      | p127 |      | p129    |
| 47pF                |         | p121 | p121    |      |      | p123 | p123 |      |          | p125 | p125 |      | p127 |      | p129    |
| 51pF                |         |      |         |      |      | p123 | p123 |      |          | p125 | p125 |      | p127 |      | p129    |
| 56pF                |         |      |         |      |      | p123 | p123 |      |          | p125 | p125 |      | p127 |      | p129    |
| 62pF                |         |      |         |      |      | p123 | p123 |      |          | p125 | p125 |      | p127 |      | p129    |
| 68pF                |         |      |         |      |      | p123 | p123 |      |          | p125 | p126 |      | p127 |      | p129    |
| 75pF                |         |      |         |      |      | p123 | p123 |      |          | p125 | p126 |      | p127 |      | p129    |
| 82pF                |         |      |         |      |      | p123 | p123 |      |          | p125 | p126 |      | p127 |      | p129    |
| 91pF                |         |      |         |      |      | p123 | p123 |      |          | p125 | p126 |      | p127 |      | p129    |
| 100pF               |         |      |         |      |      | p123 | p123 |      |          | p125 | p126 |      | p127 |      | p129    |

The indication for every 0.1 pF has been omitted for less than 10 pF.  
Refer to the Part Number List for details.

## Capacitance Table

p00 Each number in the Part Number List refers to the page number printed at the bottom of the page.

### GRJ Series High Dielectric Constant Type

p00 ← Part Number List EIA: X7R X7S X5R

| L×W (mm)            | 1.6×0.8 |      |      |      |      |      |      | 2.0×1.25 |      |      |      |      |      |      |      |      |      |      | 3.2×1.6 |     |      |      |
|---------------------|---------|------|------|------|------|------|------|----------|------|------|------|------|------|------|------|------|------|------|---------|-----|------|------|
| T max. (mm)         | 0.9     |      |      |      |      |      |      | 1.0      | 0.7  | 0.95 | 1.0  | 1.45 |      |      |      |      |      | 1.5  | 0.95    |     | 1.25 |      |
| Rated Voltage (Vdc) | 100     | 50   | 35   | 25   | 16   | 6.3  | 6.3  | 100      | 50   | 100  | 250  | 250  | 100  | 50   | 25   | 16   | 10   | 100  | 100     | 50  | 1000 | 630  |
| Cap. / TC Code      | X7R     | X7R  | X5R  | X7R  | X7R  | X7R  | X7S  | X7R      | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7S  | X7R  | X7R     | X7R | X7R  |      |
| 220pF               |         |      |      |      |      |      |      |          |      | p133 |      |      |      |      |      |      |      |      |         |     |      |      |
| 470pF               |         |      |      |      |      |      |      |          | p133 | p133 |      |      |      |      |      |      |      |      |         |     | p134 |      |
| 680pF               |         |      |      |      |      |      |      |          |      |      |      |      |      |      |      |      |      |      |         |     | p134 |      |
| 1000pF              | p133    | p133 |      |      |      |      |      | p133     | p133 |      | p133 |      |      |      |      |      |      |      |         |     | p134 | p134 |
| 1500pF              |         |      |      |      |      |      |      |          |      |      | p133 |      |      |      |      |      |      |      |         |     | p134 | p134 |
| 2200pF              | p133    | p133 |      |      |      |      |      | p133     | p133 |      | p133 |      |      |      |      |      |      |      |         |     | p134 | p134 |
| 3300pF              |         |      |      |      |      |      |      |          |      |      | p133 |      |      |      |      |      |      |      |         |     | p134 | p134 |
| 4700pF              | p133    | p133 |      |      |      |      |      | p133     | p133 |      | p133 |      |      |      |      |      |      |      |         |     | p134 | p134 |
| 6800pF              |         |      |      |      |      |      |      |          |      |      | p133 |      |      |      |      |      |      |      |         |     |      | p134 |
| 10000pF             | p133    | p133 |      |      |      |      |      | p133     | p133 |      |      | p133 |      |      |      |      |      |      |         |     |      | p134 |
| 15000pF             |         |      |      |      |      |      |      |          |      |      |      | p133 |      |      |      |      |      |      |         |     |      |      |
| 22000pF             | p133    | p133 |      |      |      |      |      | p133     | p133 |      |      | p133 |      |      |      |      |      |      |         |     |      |      |
| 33000pF             |         |      |      |      |      |      |      |          |      |      |      |      |      |      |      |      |      |      |         |     |      |      |
| 47000pF             |         | p133 |      | p133 |      |      |      |          |      |      |      |      | p133 | p133 |      |      |      |      |         |     |      |      |
| 68000pF             |         |      |      |      |      |      |      |          |      |      |      |      |      |      |      |      |      |      |         |     |      |      |
| 0.10μF              | p133    | p133 |      |      |      |      |      |          |      |      |      |      | p133 | p133 |      |      |      | p134 | p134    |     |      |      |
| 0.15μF              |         |      |      |      |      |      |      |          |      |      |      |      |      |      |      |      |      |      |         |     |      |      |
| 0.22μF              |         | p133 |      | p133 |      |      |      |          |      |      |      |      |      |      | p133 |      |      |      |         |     |      |      |
| 0.33μF              |         |      |      |      |      |      |      |          |      |      |      |      |      |      |      |      |      |      |         |     |      |      |
| 0.47μF              |         |      |      |      | p133 |      |      |          |      |      |      |      |      |      | p133 |      |      |      |         |     |      |      |
| 0.68μF              |         |      |      |      |      |      |      |          |      |      |      |      |      |      |      |      |      |      |         |     |      |      |
| 1.0μF               |         |      | p133 | p133 |      |      |      |          |      |      |      |      |      |      | p133 | p133 |      | p133 |         |     |      |      |
| 2.2μF               |         |      |      |      |      | p133 |      |          |      |      |      |      |      |      |      | p133 |      |      |         |     |      |      |
| 4.7μF               |         |      |      |      |      |      | p133 |          |      |      |      |      |      |      |      |      | p133 |      |         |     |      |      |
| 10μF                |         |      |      |      |      |      |      |          |      |      |      |      |      |      |      |      |      | p133 |         |     |      |      |
| 22μF                |         |      |      |      |      |      |      |          |      |      |      |      |      |      |      |      |      |      |         |     |      |      |
| 47μF                |         |      |      |      |      |      |      |          |      |      |      |      |      |      |      |      |      |      |         |     |      |      |

Continued on the following page. ↗

## Capacitance Table

p00

Each number in the Part Number List refers to the page number printed at the bottom of the page.

| 3.2×1.6 |      |      |      |      |      |      |      |      |     |      |      |      |      | 3.2×2.5 |      |     |      |      |      |      | L×W (mm) |                     |             |
|---------|------|------|------|------|------|------|------|------|-----|------|------|------|------|---------|------|-----|------|------|------|------|----------|---------------------|-------------|
| 1.25    | 1.35 |      |      |      | 1.8  |      |      | 1.9  |     |      |      |      |      |         | 1.5  |     |      | 2.0  |      |      | 2.3      |                     | T max. (mm) |
| 250     | 100  | 50   | 25   | 16   | 1000 | 630  | 250  | 100  | 50  | 25   | 16   | 10   | 6.3  | 1000    | 630  | 250 | 1000 | 630  | 250  | 100  |          | Rated Voltage (Vdc) |             |
| X7R     | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R | X7R  | X7R  | X7R  | X7R  | X7R     | X7R  | X7R | X7R  | X7R  | X7R  | X7R  | X7S      | Cap. / TC Code      |             |
|         |      |      |      |      |      |      |      |      |     |      |      |      |      |         |      |     |      |      |      |      |          | 220pF               |             |
|         |      |      |      |      |      |      |      |      |     |      |      |      |      |         |      |     |      |      |      |      |          | 470pF               |             |
|         |      |      |      |      |      |      |      |      |     |      |      |      |      |         |      |     |      |      |      |      |          | 680pF               |             |
|         |      |      |      |      |      |      |      |      |     |      |      |      |      |         |      |     |      |      |      |      |          | 1000pF              |             |
|         |      |      |      |      |      |      |      |      |     |      |      |      |      |         |      |     |      |      |      |      |          | 1500pF              |             |
|         |      |      |      |      |      |      |      |      |     |      |      |      |      |         |      |     |      |      |      |      |          | 2200pF              |             |
|         |      |      |      |      |      |      |      |      |     |      |      |      |      |         |      |     |      |      |      |      |          | 3300pF              |             |
|         |      |      |      |      |      |      |      |      |     |      |      |      |      |         |      |     |      |      |      |      |          | 4700pF              |             |
|         |      |      |      |      | p134 |      |      |      |     |      |      |      |      | p134    |      |     |      |      |      |      |          | 6800pF              |             |
|         |      |      |      |      | p134 |      |      |      |     |      |      |      |      | p134    |      |     |      |      |      |      |          | 10000pF             |             |
| p134    |      |      |      |      |      | p134 |      |      |     |      |      |      |      |         |      |     | p134 |      |      |      |          | 15000pF             |             |
| p134    |      |      |      |      |      | p134 |      |      |     |      |      |      |      |         | p134 |     | p134 |      |      |      |          | 22000pF             |             |
|         |      |      |      |      |      |      | p134 |      |     |      |      |      |      |         |      |     |      | p134 |      |      |          | 33000pF             |             |
|         |      |      |      |      |      |      | p134 |      |     |      |      |      |      |         |      |     |      |      | p134 |      |          | 47000pF             |             |
| p134    |      |      |      |      |      |      |      | p134 |     |      |      |      |      |         |      |     | p134 |      |      |      |          | 68000pF             |             |
|         |      | p134 |      |      |      |      |      |      |     |      |      |      |      |         |      |     |      |      |      | p134 |          | 0.10μF              |             |
|         |      |      | p134 | p134 |      |      |      |      |     |      |      |      |      |         |      |     | p134 |      |      |      |          | 0.15μF              |             |
|         |      |      |      |      |      |      |      |      |     |      |      |      |      |         |      |     |      |      |      | p134 |          | 0.22μF              |             |
|         |      |      |      |      |      |      |      |      |     |      |      |      |      |         |      |     |      |      |      |      |          | 0.33μF              |             |
|         |      |      | p134 |      |      |      |      |      |     |      |      |      |      |         |      |     |      |      |      |      |          | 0.47μF              |             |
|         |      |      |      |      |      |      |      |      |     |      |      |      |      |         |      |     |      |      |      |      |          | 0.68μF              |             |
|         |      |      |      |      |      |      |      |      |     |      |      |      |      |         |      |     |      |      |      |      |          | 1.0μF               |             |
|         |      |      |      |      |      |      |      |      |     | p134 | p134 |      |      |         |      |     |      |      |      |      |          | 2.2μF               |             |
|         |      |      |      |      |      |      |      |      |     |      | p134 |      |      |         |      |     |      |      |      |      | p134     | 4.7μF               |             |
|         |      |      |      |      |      |      |      |      |     |      |      | p134 | p134 | p134    |      |     |      |      |      |      |          | 10μF                |             |
|         |      |      |      |      |      |      |      |      |     |      |      |      | p134 | p134    |      |     |      |      |      |      |          | 22μF                |             |
|         |      |      |      |      |      |      |      |      |     |      |      |      |      |         |      |     |      |      |      |      |          | 47μF                |             |

Continued to the following table. ↗

| L×W (mm)            | 3.2×2.5 |      |      |     |      |      |      | 4.5×3.2 |      |      |      |      | 5.7×5.0 |      |      |
|---------------------|---------|------|------|-----|------|------|------|---------|------|------|------|------|---------|------|------|
| T max. (mm)         | 2.8     |      |      |     |      |      |      | 1.5     |      | 2.0  |      |      | 2.0     |      |      |
| Rated Voltage (Vdc) | 50      | 25   | 16   | 10  | 6.3  | 630  | 250  | 1000    | 630  | 250  | 1000 | 630  | 250     | 1000 | 630  |
| Cap. / TC Code      | X7R     | X7S  | X7R  | X7R | X7R  | X7R  | X7R  | X7R     | X7R  | X7R  | X7R  | X7R  | X7R     | X7R  | X7R  |
| 33000pF             |         |      |      |     |      |      |      |         |      | p134 |      |      |         |      |      |
| 47000pF             |         |      |      |     |      |      |      |         |      | p135 |      |      |         |      |      |
| 68000pF             |         |      |      |     |      |      |      | p134    |      |      |      |      | p135    |      |      |
| 0.10μF              |         |      |      |     |      |      |      |         |      | p135 |      |      | p135    |      |      |
| 0.15μF              |         |      |      |     |      |      |      |         | p134 |      |      |      |         | p135 |      |
| 0.22μF              |         |      |      |     |      |      |      |         |      |      |      | p135 |         | p135 |      |
| 0.33μF              |         |      |      |     |      |      |      |         |      |      |      | p135 |         |      | p135 |
| 0.47μF              |         |      |      |     |      |      |      |         |      |      |      | p135 |         |      | p135 |
| 0.68μF              |         |      |      |     |      |      |      |         |      |      |      |      |         |      | p135 |
| 1.0μF               |         |      |      |     |      |      |      |         |      |      |      |      |         |      | p135 |
| 2.2μF               |         |      |      |     |      |      |      |         |      |      |      |      |         |      |      |
| 4.7μF               | p134    |      |      |     |      |      |      |         |      |      |      |      |         |      |      |
| 10μF                | p134    | p134 | p134 |     |      |      |      |         |      |      |      |      |         |      |      |
| 22μF                |         |      |      |     | p134 | p134 |      |         |      |      |      |      |         |      |      |
| 47μF                |         |      |      |     |      | p134 | p134 |         |      |      |      |      |         |      |      |

## Capacitance Table

p00 Each number in the Part Number List refers to the page number printed at the bottom of the page.

### GR3 Series High Dielectric Constant Type

p00 ← Part Number List EIA: X7T

| L×W (mm)            | 2.0×1.25 |      | 3.2×1.6 |      |      |      |      |      |      |      | 3.2×2.5 |     |      |      |      | 4.5×3.2 |      |      |      | 5.7×5.0 |      |      |     |      |
|---------------------|----------|------|---------|------|------|------|------|------|------|------|---------|-----|------|------|------|---------|------|------|------|---------|------|------|-----|------|
| T max. (mm)         | 1.0      | 1.45 | 1.0     |      | 1.25 |      |      | 1.8  |      |      | 1.5     |     | 2.0  |      |      | 1.5     | 2.0  |      | 2.0  |         | 2.7  |      |     |      |
| Rated Voltage (Vdc) | 250      | 250  | 450     | 250  | 630  | 450  | 250  | 630  | 450  | 250  | 630     | 250 | 630  | 450  | 250  | 250     | 630  | 450  | 250  | 630     | 450  | 250  | 630 | 250  |
| Cap. / TC Code      | X7T      | X7T  | X7T     | X7T  | X7T  | X7T  | X7T  | X7T  | X7T  | X7T  | X7T     | X7T | X7T  | X7T  | X7T  | X7T     | X7T  | X7T  | X7T  | X7T     | X7T  | X7T  | X7T | X7T  |
| 10000pF             | p131     |      | p131    |      | p131 |      |      |      |      |      |         |     |      |      |      |         |      |      |      |         |      |      |     |      |
| 15000pF             | p131     |      | p131    |      |      |      |      | p131 |      |      |         |     |      |      |      |         |      |      |      |         |      |      |     |      |
| 22000pF             |          | p131 |         |      |      | p131 |      |      |      |      | p131    |     |      |      |      |         |      |      |      |         |      |      |     |      |
| 33000pF             |          |      |         | p131 |      | p131 |      |      |      |      |         |     | p131 |      |      |         |      |      |      |         |      |      |     |      |
| 47000pF             |          |      |         |      |      |      | p131 |      | p131 |      |         |     | p131 |      |      |         |      |      |      |         |      |      |     |      |
| 68000pF             |          |      |         |      |      |      |      |      |      | p131 |         |     |      | p131 |      |         | p131 |      |      |         |      |      |     |      |
| 0.10μF              |          |      |         |      |      |      |      |      |      |      | p131    |     |      | p131 |      |         |      |      |      | p131    |      |      |     |      |
| 0.15μF              |          |      |         |      |      |      |      |      |      |      |         |     |      |      | p131 |         | p131 |      |      | p131    |      |      |     |      |
| 0.22μF              |          |      |         |      |      |      |      |      |      |      |         |     |      |      |      | p131    |      |      |      |         | p131 | p131 |     | p131 |
| 0.33μF              |          |      |         |      |      |      |      |      |      |      |         |     |      |      |      |         |      | p131 |      |         | p131 |      |     |      |
| 0.47μF              |          |      |         |      |      |      |      |      |      |      |         |     |      |      |      |         |      |      | p131 | p131    |      |      |     |      |
| 0.68μF              |          |      |         |      |      |      |      |      |      |      |         |     |      |      |      |         |      |      |      |         | p131 |      |     |      |
| 1.0μF               |          |      |         |      |      |      |      |      |      |      |         |     |      |      |      |         |      |      |      |         |      |      |     | p131 |

## Capacitance Table

p00 Each number in the Part Number List refers to the page number printed at the bottom of the page.

### LLA Series High Dielectric Constant Type

p00 ← Part Number List EIA: X7R X7S

| L×W (mm)            | 1.6×0.8 | 2.0×1.25 |      |      |      |      |      |      |      |      |      | 3.2×1.6 |      |      |      |      |      |     |      |
|---------------------|---------|----------|------|------|------|------|------|------|------|------|------|---------|------|------|------|------|------|-----|------|
| T max. (mm)         | 0.55    | 0.55     |      |      |      |      | 0.95 |      |      |      |      | 0.55    |      |      | 0.95 |      | 1.25 |     |      |
| Rated Voltage (Vdc) | 4       | 25       | 16   | 10   | 6.3  | 4    | 25   | 16   | 10   | 6.3  | 4    | 16      | 10   | 6.3  | 16   | 10   | 16   | 10  | 10   |
| Cap. / TC Code      | X7S     | X7R      | X7R  | X7R  | X7R  | X7S  | X7R  | X7R  | X7R  | X7R  | X7S  | X7R     | X7R  | X7R  | X7R  | X7R  | X7R  | X7R | X7R  |
| 10000pF             |         | p137     |      |      |      |      | p137 |      |      |      |      |         |      |      |      |      |      |     |      |
| 22000pF             |         | p137     |      |      |      |      | p137 |      |      |      |      |         |      |      |      |      |      |     |      |
| 47000pF             |         |          | p137 |      |      |      | p137 |      |      |      |      |         |      |      |      |      |      |     |      |
| 0.10μF              | p137    |          | p137 |      |      |      |      | p137 |      |      |      |         |      |      |      |      |      |     |      |
| 0.22μF              | p137    |          |      | p137 |      |      |      | p137 |      |      |      | p137    |      |      |      |      |      |     |      |
| 0.47μF              | p137    |          |      |      | p137 |      |      |      | p137 |      |      |         | p137 |      | p137 |      |      |     |      |
| 1.0μF               |         |          |      |      |      | p137 |      |      |      | p137 |      |         |      | p137 |      | p137 | p137 |     |      |
| 2.2μF               | p137    |          |      |      |      |      |      |      |      |      | p137 |         |      | p137 |      |      |      |     | p137 |
| 4.7μF               |         |          |      |      |      | p137 |      |      |      |      |      |         |      |      |      |      |      |     |      |

### LLL Series High Dielectric Constant Type

p00 ← Part Number List EIA: X7R X7S X6S X5R

| L×W (mm)            | 0.5×1.0 |      |      |      | 0.6×1.0 | 0.8×1.6 |      |      |      |      |      |      |      |      |      | 1.25×2.0 |      |      |      |      |      |      |      |
|---------------------|---------|------|------|------|---------|---------|------|------|------|------|------|------|------|------|------|----------|------|------|------|------|------|------|------|
| T max. (mm)         | 0.35    |      | 0.45 |      | 0.45    | 0.5     |      |      |      | 0.55 | 0.6  |      |      |      | 0.5  |          |      |      |      |      |      |      | 0.7  |
| Rated Voltage (Vdc) | 6.3     | 4    | 4    | 25   | 16      | 10      | 4    | 4    | 50   | 25   | 16   | 10   | 4    | 50   | 25   | 16       | 10   | 6.3  | 4    | 50   | 25   | 25   | 25   |
| Cap. / TC Code      | X6S     | X7S  | X6S  | X5R  | X7R     | X7R     | X7R  | X7S  | X7R  | X7R  | X7R  | X7R  | X7S  | X7R  | X7R  | X7R      | X7R  | X7R  | X7S  | X7R  | X7R  | X7R  | X7R  |
| 2200pF              |         |      |      |      |         |         |      |      | p139 |      |      |      |      |      |      |          |      |      |      |      |      |      |      |
| 4700pF              |         |      |      |      |         |         |      |      | p139 |      |      |      |      |      |      |          |      |      |      |      |      |      |      |
| 10000pF             |         |      |      |      | p139    |         |      |      |      | p139 |      |      |      | p139 |      |          |      |      |      |      |      | p139 |      |
| 22000pF             |         |      |      |      |         | p139    |      |      |      |      | p139 |      |      |      | p139 |          |      |      |      |      | p139 |      |      |
| 47000pF             |         |      |      |      |         | p139    |      |      |      |      |      | p139 |      |      |      | p139     |      |      |      |      |      |      | p139 |
| 0.10μF              | p139    |      |      |      |         |         | p139 |      |      |      |      |      | p139 |      |      |          | p139 |      |      |      |      |      | p139 |
| 0.22μF              | p139    |      |      |      |         |         |      | p139 |      |      |      |      |      | p139 |      |          |      | p139 |      |      |      |      |      |
| 0.47μF              |         | p139 |      |      |         |         |      |      |      |      |      |      |      |      | p139 |          |      |      | p139 |      |      |      |      |
| 1.0μF               |         |      | p139 |      |         |         |      |      |      |      |      |      |      |      |      |          |      |      |      | p139 |      |      |      |
| 2.2μF               |         |      |      |      |         |         |      | p139 |      |      |      |      |      |      |      |          |      |      |      |      |      |      |      |
| 4.3μF               |         |      |      | p139 |         |         |      |      |      |      |      |      |      |      |      |          |      |      |      |      |      |      |      |
| 4.7μF               |         |      |      |      |         |         |      |      |      |      |      |      |      |      |      |          |      |      |      |      |      |      |      |
| 10μF                |         |      |      |      |         |         |      |      |      |      |      |      |      |      |      |          |      |      |      |      |      |      |      |

Continued to the following table. ↗

| L×W (mm)            | 1.25×2.0 |      |      |      | 1.6×3.2 |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------|----------|------|------|------|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| T max. (mm)         | 0.7      |      | 0.95 |      | 0.5     |      |      |      | 0.8  |      |      |      | 1.25 |      |      |      |      |      |
| Rated Voltage (Vdc) | 10       | 16   | 10   | 4    | 50      | 25   | 16   | 10   | 50   | 25   | 16   | 10   | 6.3  | 50   | 25   | 16   | 10   | 6.3  |
| Cap. / TC Code      | X7R      | X7R  | X7R  | X7S  | X7R     | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X5R  |
| 2200pF              |          |      |      |      |         |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 4700pF              |          |      |      |      |         |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 10000pF             |          |      |      |      | p139    |      |      |      | p139 |      |      |      |      |      |      |      |      |      |
| 22000pF             |          |      |      |      | p139    |      |      |      | p139 |      |      |      |      |      |      |      |      |      |
| 47000pF             |          |      |      |      |         | p139 |      |      | p139 |      |      |      |      |      |      |      |      |      |
| 0.10μF              |          |      |      |      |         | p139 |      |      |      | p139 |      |      |      | p139 |      |      |      |      |
| 0.22μF              | p139     | p139 |      |      |         |      | p139 |      |      |      | p139 |      |      |      | p139 |      |      |      |
| 0.47μF              |          |      | p139 |      |         |      |      | p139 |      |      | p139 |      |      |      | p139 |      |      |      |
| 1.0μF               |          |      |      | p139 |         |      |      |      |      |      |      | p139 |      |      |      | p139 |      |      |
| 2.2μF               |          |      |      |      | p139    |      |      |      |      |      |      |      | p139 |      |      |      | p139 |      |
| 4.3μF               |          |      |      |      |         |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 4.7μF               |          |      |      |      |         |      |      |      |      |      |      |      |      |      |      |      | p139 |      |
| 10μF                |          |      |      |      |         |      |      |      |      |      |      |      |      |      |      |      |      | p139 |

## Capacitance Table

p00 ← Part Number List EIA: X7R X7S Each number in the Part Number List refers to the page number printed at the bottom of the page.

### LLM Series High Dielectric Constant Type

| p00                 | ← Part Number List |      | EIA: X7R X7S |      |
|---------------------|--------------------|------|--------------|------|
| L×W (mm)            | 2.0×1.25           |      | 3.2×1.6      |      |
| T max. (mm)         | 0.55               |      | 0.55         |      |
| Rated Voltage (Vdc) | 6.3                | 4    | 16           | 10   |
| Cap. / TC Code      | X7R                | X7S  | X7R          | X7R  |
| 0.10μF              |                    |      | p141         |      |
| 0.22μF              | p141               |      | p141         |      |
| 0.47μF              | p141               |      |              | p141 |
| 1.0μF               |                    | p141 |              |      |
| 2.2μF               |                    |      |              | p141 |

### LLR Series High Dielectric Constant Type

| p00                 | ← Part Number List |      | EIA: X7S |      |
|---------------------|--------------------|------|----------|------|
| L×W (mm)            | 0.8×1.6            |      |          |      |
| T max. (mm)         | 0.55               |      |          |      |
| Rated Voltage (Vdc) | 4                  |      |          |      |
| TC Code             | X7S                |      |          |      |
| Cap. / ESR (mΩ)     | 100                | 220  | 470      | 1000 |
| 1.0μF               | p143               | p143 | p143     | p143 |

### KR3 Series High Dielectric Constant Type

|                     |                    |      |      |          |      |      |      |      |      |      |      |
|---------------------|--------------------|------|------|----------|------|------|------|------|------|------|------|
| p00                 | ← Part Number List |      |      | EIA: X7T |      |      |      |      |      |      |      |
| L×W (mm)            | 6.1×5.3            |      |      |          |      |      |      |      |      |      |      |
| T max. (mm)         | 3.0                |      |      | 3.9      |      |      | 5.0  |      | 6.7  |      |      |
| Rated Voltage (Vdc) | 630                | 450  | 250  | 630      | 450  | 250  | 450  | 250  | 630  | 450  | 250  |
| Cap. / TC Code      | X7T                | X7T  | X7T  | X7T      | X7T  | X7T  | X7T  | X7T  | X7T  | X7T  | X7T  |
| 0.10μF              | p149               |      |      |          |      |      |      |      |      |      |      |
| 0.15μF              | p149               |      |      |          |      |      |      |      |      |      |      |
| 0.22μF              |                    | p149 |      | p149     |      |      |      |      |      |      |      |
| 0.27μF              |                    |      |      | p149     |      |      |      |      |      |      |      |
| 0.33μF              |                    | p149 |      |          |      |      |      |      |      |      |      |
| 0.47μF              |                    | p149 | p149 |          |      |      |      |      | p149 |      |      |
| 0.56μF              |                    |      |      |          | p149 |      |      |      | p149 |      |      |
| 0.68μF              |                    |      | p149 |          |      |      | p149 |      |      |      |      |
| 1.0μF               |                    |      |      |          |      | p149 | p149 |      |      |      |      |
| 1.2μF               |                    |      |      |          |      |      |      |      |      | p149 |      |
| 1.5μF               |                    |      |      |          |      |      |      | p149 |      |      |      |
| 2.2μF               |                    |      |      |          |      |      |      |      |      |      | p149 |

## Capacitance Table

p00 Each number in the Part Number List refers to the page number printed at the bottom of the page.

### KRM Series High Dielectric Constant Type

p00 ← Part Number List EIA: X7R X7S X6S X5R

| L×W (mm)            | 2.2×1.25 |      |      |      |      | 3.5×1.7 |      |      |      |      | 3.6×<br>1.7 | 3.7×<br>1.85 | 6.1×5.3 |      |     |     |      |      |      |      |      |      |     |  |
|---------------------|----------|------|------|------|------|---------|------|------|------|------|-------------|--------------|---------|------|-----|-----|------|------|------|------|------|------|-----|--|
| T max. (mm)         | 1.9      |      | 2.0  |      |      | 2.0     | 2.9  |      |      |      | 2.9         | 2.9          | 3.0     |      |     |     |      |      |      |      |      |      | 3.9 |  |
| Rated Voltage (Vdc) | 25       | 16   | 25   |      |      | 25      | 100  | 50   | 35   | 25   | 50          | 100          | 1000    | 630  | 250 | 100 | 63   | 50   | 35   | 25   | 100  | 63   |     |  |
| Cap. / TC Code      | X5R      | X5R  | X7S  | X6S  | X5R  | X5R     | X7R  | X7R  | X6S  | X6S  | X7R         | X7R          | X7R     | X7R  | X7R | X7R | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  |     |  |
| 68000pF             |          |      |      |      |      |         |      |      |      |      |             |              | p146    |      |     |     |      |      |      |      |      |      |     |  |
| 0.10μF              |          |      |      |      |      |         |      |      |      |      |             |              | p146    |      |     |     |      |      |      |      |      |      |     |  |
| 0.15μF              |          |      |      |      |      |         |      |      |      |      |             |              |         | p146 |     |     |      |      |      |      |      |      |     |  |
| 0.22μF              |          |      |      |      |      |         |      |      |      |      |             |              |         | p146 |     |     |      |      |      |      |      |      |     |  |
| 0.33μF              |          |      |      |      |      |         |      |      |      |      |             |              |         |      |     |     |      |      |      |      |      |      |     |  |
| 0.47μF              |          |      |      |      |      |         |      |      |      |      |             |              |         |      |     |     |      |      |      |      |      |      |     |  |
| 0.68μF              |          |      |      |      |      |         |      |      |      |      |             |              |         |      |     |     | p146 |      |      |      |      |      |     |  |
| 1.0μF               |          |      |      |      |      |         | p146 |      |      |      |             |              |         |      |     |     | p146 |      |      |      |      |      |     |  |
| 1.5μF               |          |      |      |      |      |         |      |      |      |      |             |              |         |      |     |     |      |      |      |      |      |      |     |  |
| 2.2μF               |          |      |      |      |      |         |      |      |      |      | p146        | p146         |         |      |     |     |      |      |      |      |      |      |     |  |
| 4.7μF               |          |      |      |      |      |         |      | p146 |      |      |             |              |         |      |     |     | p146 | p146 | p146 |      |      |      |     |  |
| 6.8μF               |          |      |      |      |      |         |      |      |      |      |             |              |         |      |     |     |      |      |      |      | p146 |      |     |  |
| 10μF                | p146     | p146 | p146 | p146 |      | p146    |      |      | p146 | p146 |             |              |         |      |     |     |      | p146 | p146 |      | p146 | p146 |     |  |
| 15μF                |          |      |      |      |      |         |      |      |      |      |             |              |         |      |     |     |      |      | p146 | p146 |      |      |     |  |
| 17μF                |          |      |      |      |      |         |      |      |      |      |             |              |         |      |     |     |      |      |      |      |      |      |     |  |
| 22μF                |          |      |      |      | p146 |         |      |      |      |      |             |              |         |      |     |     |      |      |      |      |      |      |     |  |
| 33μF                |          |      |      |      |      |         |      |      |      |      |             |              |         |      |     |     |      |      |      |      |      |      |     |  |
| 47μF                |          |      |      |      |      |         |      |      |      |      |             |              |         |      |     |     |      |      |      |      |      |      |     |  |
| 68μF                |          |      |      |      |      |         |      |      |      |      |             |              |         |      |     |     |      |      |      |      |      |      |     |  |

Continued to the following table. ↗

| L×W (mm)            | 6.1×5.3 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| T max. (mm)         | 3.9     |      |      | 5.0  |      |      |      |      |      |      | 6.7  |      |      |      |      |
| Rated Voltage (Vdc) | 50      | 35   | 25   | 1000 | 630  | 250  | 100  | 50   | 35   | 25   | 100  | 63   | 50   | 35   | 25   |
| Cap. / TC Code      | X7R     | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  |
| 68000pF             |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 0.10μF              |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 0.15μF              |         |      |      | p146 |      |      |      |      |      |      |      |      |      |      |      |
| 0.22μF              |         |      |      | p146 |      |      |      |      |      |      |      |      |      |      |      |
| 0.33μF              |         |      |      |      | p146 |      |      |      |      |      |      |      |      |      |      |
| 0.47μF              |         |      |      |      | p146 |      |      |      |      |      |      |      |      |      |      |
| 0.68μF              |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 1.0μF               |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 1.5μF               |         |      |      |      |      | p146 |      |      |      |      |      |      |      |      |      |
| 2.2μF               |         |      |      |      |      | p146 |      |      |      |      |      |      |      |      |      |
| 4.7μF               |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 6.8μF               |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 10μF                |         |      |      |      |      |      | p146 |      |      |      |      |      |      |      |      |
| 15μF                |         |      |      |      |      |      |      |      |      |      | p146 |      |      |      |      |
| 17μF                | p146    | p146 |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 22μF                |         | p146 | p146 |      |      |      |      | p146 | p146 |      | p146 | p146 |      |      |      |
| 33μF                |         |      | p146 |      |      |      |      |      | p146 | p146 |      |      | p146 |      |      |
| 47μF                |         |      |      |      |      |      |      |      |      |      |      |      |      | p146 | p146 |
| 68μF                |         |      |      |      |      |      |      |      |      |      |      |      |      |      | p146 |

## Capacitance Table

**p00** Each number in the Part Number List refers to the page number printed at the bottom of the page.

### NFM Series

**p00** ← Part Number List

| L×W (mm)            | 1.0×0.5 |      |      |      |      |      |      |      | 1.6×0.8 |      |      |      | 2.0×1.25 |      |      |      |      | 3.2×<br>1.25 | 3.2×1.6 |      |      |      | 4.5×1.6 |      |  |
|---------------------|---------|------|------|------|------|------|------|------|---------|------|------|------|----------|------|------|------|------|--------------|---------|------|------|------|---------|------|--|
| T max. (mm)         | 0.35    |      | 0.5  |      |      |      | 0.65 | 0.7  | 0.7     |      | 0.9  |      | 0.95     |      |      |      |      | 0.9          | 1.5     |      |      | 1.2  |         |      |  |
| Rated Voltage (Vdc) | 6.3     | 4    | 16   | 10   | 6.3  | 2.5  | 2.5  | 2.5  | 16      | 6.3  | 10   | 6.3  | 50       | 25   | 16   | 10   | 6.3  | 50           | 100     | 50   | 6.3  | 100  | 50      | 25   |  |
| Cap. / TC Code      | -       | -    | -    | -    | -    | -    | -    | -    | -       | -    | -    | -    | -        | -    | -    | -    | -    | -            | -       | -    | -    | -    | -       | -    |  |
| 100pF               |         |      |      |      |      |      |      |      | p151    |      |      |      |          |      |      |      |      |              |         |      |      |      |         |      |  |
| 220pF               |         |      |      |      |      |      |      |      | p151    |      |      |      | p151     |      |      |      |      | p151         |         |      |      |      |         |      |  |
| 470pF               |         |      |      |      |      |      |      |      | p151    |      |      |      | p151     |      |      |      |      | p151         |         |      |      |      | p151    |      |  |
| 1000pF              |         |      |      |      |      |      |      |      | p151    |      |      |      | p151     |      |      |      |      | p151         |         |      |      |      | p151    |      |  |
| 2200pF              |         |      | p151 | p151 |      |      |      |      | p151    |      |      |      | p151     |      |      |      |      | p151         |         |      |      |      | p151    |      |  |
| 10000pF             |         |      |      |      |      |      |      |      |         |      |      |      |          |      |      |      |      |              | p151    | p151 |      |      |         |      |  |
| 15000pF             |         |      |      |      |      |      |      |      |         |      |      |      |          |      |      |      |      |              | p151    | p151 |      |      |         |      |  |
| 22000pF             |         |      | p151 | p151 |      |      |      |      | p151    |      |      |      | p151     |      |      |      |      | p151         | p151    | p151 |      | p151 |         |      |  |
| 47000pF             |         |      | p151 | p151 |      |      |      |      |         |      |      |      |          |      |      |      |      |              |         |      |      |      |         |      |  |
| 0.10μF              |         |      |      | p151 | p151 |      |      |      | p151    |      |      |      |          | p151 |      |      |      |              | p151    | p151 |      |      |         |      |  |
| 0.20μF              |         |      |      |      |      |      |      |      |         |      |      |      |          |      |      |      |      |              |         |      |      |      | p151    |      |  |
| 0.22μF              |         |      |      | p151 | p151 |      |      |      |         | p151 |      |      |          |      | p151 |      |      |              |         |      |      |      |         |      |  |
| 0.47μF              | p151    | p151 |      |      |      |      |      |      |         | p151 |      |      |          |      | p151 |      |      |              |         |      |      |      |         |      |  |
| 1.0μF               |         | p151 |      |      |      |      |      |      |         | p151 |      | p151 |          |      | p151 | p151 |      |              |         |      |      |      |         |      |  |
| 1.5μF               |         |      |      |      |      |      |      |      |         |      |      |      |          |      |      |      |      |              |         |      |      |      | p151    | p151 |  |
| 2.2μF               |         |      |      |      |      |      |      |      |         | p151 | p151 |      |          |      |      |      | p151 |              |         |      |      |      |         |      |  |
| 4.3μF               |         |      |      |      |      | p151 |      |      |         |      |      |      |          |      |      |      |      |              |         |      |      |      |         |      |  |
| 4.7μF               |         |      |      |      |      |      |      |      |         |      |      |      |          |      |      |      | p151 |              |         |      |      |      |         |      |  |
| 7.5μF               |         |      |      |      |      |      | p151 |      |         |      |      |      |          |      |      |      |      |              |         |      |      |      |         |      |  |
| 9.1μF               |         |      |      |      |      |      |      | p151 |         |      |      |      |          |      |      |      |      |              |         |      |      |      |         |      |  |
| 10μF                |         |      |      |      |      |      |      |      |         |      |      |      |          |      |      |      | p151 |              |         |      |      |      |         |      |  |
| 27μF                |         |      |      |      |      |      |      |      |         |      |      |      |          |      |      |      |      |              |         |      | p151 |      |         |      |  |

## Capacitance Table

p00 Each number in the Part Number List refers to the page number printed at the bottom of the page.

### GCH Series Temperature Compensating Type

p00 ← Part Number List EIA: C0G

| L×W (mm)            | 1.0×0.5 | 1.6×0.8 |      | 2.0×1.25 |      |      |      | 3.2×1.6 |      |      |
|---------------------|---------|---------|------|----------|------|------|------|---------|------|------|
| T max. (mm)         | 0.55    | 0.9     |      | 0.7      | 0.95 | 1.4  |      | 0.95    | 1.25 |      |
| Rated Voltage (Vdc) | 50      | 100     | 50   | 100      | 50   | 50   | 50   | 100     | 50   | 50   |
| Cap. / TC Code      | C0G     | C0G     | C0G  | C0G      | C0G  | C0G  | C0G  | C0G     | C0G  | C0G  |
| 1.0pF               | p153    | p153    | p153 |          |      |      |      |         |      |      |
| 2.0pF               | p153    | p153    | p153 |          |      |      |      |         |      |      |
| 3.0pF               | p153    | p153    | p153 |          |      |      |      |         |      |      |
| 4.0pF               | p153    | p153    | p153 |          |      |      |      |         |      |      |
| 5.0pF               | p153    | p153    | p153 |          |      |      |      |         |      |      |
| 6.0pF               | p153    | p153    | p153 |          |      |      |      |         |      |      |
| 7.0pF               | p153    | p153    | p153 |          |      |      |      |         |      |      |
| 8.0pF               | p153    | p153    | p153 |          |      |      |      |         |      |      |
| 9.0pF               | p153    | p153    | p153 |          |      |      |      |         |      |      |
| 10pF                | p153    | p153    | p153 |          |      |      |      |         |      |      |
| 15pF                | p153    | p153    | p153 |          |      |      |      |         |      |      |
| 22pF                | p153    | p153    | p153 |          |      |      |      |         |      |      |
| 33pF                | p153    | p153    | p153 |          |      |      |      |         |      |      |
| 47pF                | p153    | p153    | p153 |          |      |      |      |         |      |      |
| 68pF                | p153    | p153    | p153 |          |      |      |      |         |      |      |
| 100pF               | p153    | p153    | p153 | p153     |      |      |      |         |      |      |
| 150pF               | p153    | p153    | p153 | p153     |      |      |      |         |      |      |
| 220pF               | p153    | p153    | p153 | p153     |      |      |      |         |      |      |
| 330pF               | p153    | p153    | p153 | p153     |      |      |      |         |      |      |
| 470pF               | p153    | p153    | p153 | p153     |      |      |      |         |      |      |
| 680pF               |         | p153    | p153 | p153     |      |      |      |         |      |      |
| 1000pF              | p153    | p153    | p153 | p153     | p153 |      |      |         |      |      |
| 1500pF              |         | p153    | p153 | p153     | p153 |      |      |         |      |      |
| 2200pF              |         |         | p153 | p153     | p153 |      |      | p153    |      |      |
| 3300pF              |         |         | p153 | p153     | p153 |      |      | p153    |      |      |
| 4700pF              |         |         |      |          | p153 |      |      | p153    | p154 |      |
| 6800pF              |         |         |      |          |      | p153 |      | p154    | p154 |      |
| 10000pF             |         |         |      |          |      | p153 |      | p154    | p154 |      |
| 15000pF             |         |         |      |          |      | p153 |      |         | p154 |      |
| 22000pF             |         |         |      |          |      |      | p153 |         | p154 |      |
| 33000pF             |         |         |      |          |      |      |      |         | p154 |      |
| 47000pF             |         |         |      |          |      |      |      |         |      | p154 |

## Capacitance Table

**p00** Each number in the Part Number List refers to the page number printed at the bottom of the page.

### GCH Series High Dielectric Constant Type

**p00** ← Part Number List EIA: **X7R** **X7S**

| L×W (mm)            | 1.0×0.5 |      |      |      |      |      | 1.6×0.8 |      |      |      |      |      | 2.0×1.25 |      |      |      |      |      |      |      |      |      |
|---------------------|---------|------|------|------|------|------|---------|------|------|------|------|------|----------|------|------|------|------|------|------|------|------|------|
| T max. (mm)         | 0.55    |      |      |      |      | 0.7  | 0.9     |      |      |      |      |      | 0.95     |      | 1.4  |      |      |      |      |      |      |      |
| Rated Voltage (Vdc) | 100     | 50   | 25   | 16   | 10   | 10   | 100     | 50   | 25   | 16   | 10   | 6.3  | 25       | 16   | 100  | 50   | 35   | 25   | 16   | 10   | 6.3  |      |
| Cap. / TC Code      | X7R     | X7R  | X7R  | X7R  | X7R  | X7S  | X7R     | X7R  | X7R  | X7R  | X7S  | X7R  | X7R      | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7S  | X7R  |
| 220pF               | p155    | p155 |      |      |      |      |         |      |      |      |      |      |          |      |      |      |      |      |      |      |      |      |
| 470pF               | p155    | p155 |      |      |      |      |         |      |      |      |      |      |          |      |      |      |      |      |      |      |      |      |
| 1000pF              | p155    | p155 |      |      |      |      | p155    | p155 |      |      |      |      |          |      |      |      |      |      |      |      |      |      |
| 2200pF              | p155    | p155 |      |      |      |      | p155    | p155 |      |      |      |      |          |      |      |      |      |      |      |      |      |      |
| 4700pF              | p155    | p155 |      |      |      |      | p155    | p155 |      |      |      |      |          |      |      |      |      |      |      |      |      |      |
| 10000pF             |         | p155 | p155 |      |      |      | p155    | p155 |      |      |      |      |          |      | p155 |      |      |      |      |      |      |      |
| 22000pF             |         | p155 | p155 |      |      |      | p155    | p155 |      |      |      |      |          |      | p155 |      |      |      |      |      |      |      |
| 47000pF             |         | p155 | p155 | p155 |      |      |         | p155 | p155 |      |      |      |          |      | p155 | p155 |      |      |      |      |      |      |
| 0.10μF              |         | p155 |      | p155 | p155 |      | p155    | p155 | p155 | p155 |      |      |          |      | p155 | p155 |      |      |      |      |      |      |
| 0.22μF              |         |      |      | p155 |      |      |         | p155 | p155 |      |      |      |          |      |      | p155 |      | p155 |      |      |      |      |
| 0.47μF              |         |      |      |      |      |      |         |      | p155 | p155 |      |      | p155     |      |      | p155 |      |      |      |      |      |      |
| 1.0μF               |         |      |      |      |      | p155 |         |      | p155 | p155 |      |      |          | p155 |      | p155 | p155 | p155 |      |      |      |      |
| 2.2μF               |         |      |      |      |      |      |         |      |      |      | p155 | p155 |          |      |      |      |      | p155 | p155 | p155 |      |      |
| 4.7μF               |         |      |      |      |      |      |         |      |      |      |      |      |          |      |      |      |      |      | p155 |      | p155 |      |
| 10μF                |         |      |      |      |      |      |         |      |      |      |      |      |          |      |      |      |      |      |      | p155 |      | p155 |
| 22μF                |         |      |      |      |      |      |         |      |      |      |      |      |          |      |      |      |      |      |      |      |      |      |
| 47μF                |         |      |      |      |      |      |         |      |      |      |      |      |          |      |      |      |      |      |      |      |      |      |

Continued to the following table. ↗

| L×W (mm)            | 2.0×1.25 |      |      | 3.2×1.6 |      |      |      |      |      |      |      |      | 3.2×2.5 |      |      |      |      |      |
|---------------------|----------|------|------|---------|------|------|------|------|------|------|------|------|---------|------|------|------|------|------|
| T max. (mm)         | 1.45     |      |      | 0.95    | 1.25 |      | 1.3  | 1.8  |      |      |      |      | 2.2     |      |      | 2.7  |      |      |
| Rated Voltage (Vdc) | 100      | 35   | 25   | 100     | 100  | 50   | 25   | 100  | 50   | 25   | 16   | 10   | 100     | 25   | 16   | 50   | 10   | 6.3  |
| Cap. / TC Code      | X7S      | X7S  | X7S  | X7R     | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R  | X7R     | X7R  | X7R  | X7R  | X7R  | X7R  |
| 220pF               |          |      |      |         |      |      |      |      |      |      |      |      |         |      |      |      |      |      |
| 470pF               |          |      |      |         |      |      |      |      |      |      |      |      |         |      |      |      |      |      |
| 1000pF              |          |      |      |         |      |      |      |      |      |      |      |      |         |      |      |      |      |      |
| 2200pF              |          |      |      |         |      |      |      |      |      |      |      |      |         |      |      |      |      |      |
| 4700pF              |          |      |      |         |      |      |      |      |      |      |      |      |         |      |      |      |      |      |
| 10000pF             |          |      |      |         |      |      |      |      |      |      |      |      |         |      |      |      |      |      |
| 22000pF             |          |      |      |         |      |      |      |      |      |      |      |      |         |      |      |      |      |      |
| 47000pF             |          |      |      |         |      |      |      |      |      |      |      |      |         |      |      |      |      |      |
| 0.10μF              |          |      |      | p155    |      |      |      |      |      |      |      |      |         |      |      |      |      |      |
| 0.22μF              |          |      |      |         | p155 |      |      |      |      |      |      |      |         |      |      |      |      |      |
| 0.47μF              |          |      |      |         |      | p155 |      |      |      |      |      |      |         |      |      |      |      |      |
| 1.0μF               | p155     |      |      |         |      | p155 |      | p155 |      |      |      |      |         |      |      | p155 |      |      |
| 2.2μF               |          |      |      |         |      |      | p155 |      | p155 |      |      |      | p155    |      |      |      |      |      |
| 4.7μF               |          | p155 | p155 |         |      |      |      |      |      | p155 | p155 |      |         | p155 |      | p155 |      |      |
| 10μF                |          |      |      |         |      |      |      |      |      |      | p155 | p155 |         |      | p155 |      |      |      |
| 22μF                |          |      |      |         |      |      |      |      |      |      |      |      |         |      |      |      | p155 |      |
| 47μF                |          |      |      |         |      |      |      |      |      |      |      |      |         |      |      |      |      | p155 |

## Search Capacitors

Specifications and Test Methods, Package, Chart of Characteristic Data, please refer to the search web page.  
<http://www.murata.com/en-global/products/capacitor>

| 0.4×0.2mm |               |         |        |         |                    |  |
|-----------|---------------|---------|--------|---------|--------------------|--|
| T max.    | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |  |
| 0.22mm    | 50Vdc         | COG     | 0.20pF | ±0.05pF | GRM0225C1HR20WA03# |  |
|           |               |         | 0.30pF | ±0.1pF  | GRM0225C1HR20BA03# |  |
|           |               |         | 0.40pF | ±0.05pF | GRM0225C1HR30WA03# |  |
|           |               |         | 0.50pF | ±0.1pF  | GRM0225C1HR30BA03# |  |
|           |               |         | 0.60pF | ±0.05pF | GRM0225C1HR40WA03# |  |

Links are provided to the product detail pages on the web, and are shown below in the product number table from the PDF version of the catalog which is available on the web.

### Data Sheet

The product details page can be output in PDF.

### Status and Features Icons

The status and features of products can be checked at once. When ? is clicked, a description of each icon will be displayed.

### Characteristics & Applications

This links to the introduction page of each series.

### Detailed Specifications Sheet

- Rated value
- Specifications and Test Methods
- Package
- Caution, Notice (Storage, Soldering and Mounting, ....etc.)

### Characteristics Data

The following characteristics data of the main products can be acquired.

- SPICE Netlist (mod type)
- S parameter (S2P type)
- Reliability Test Data \*Typical data

- Shape (Dimensions)
- Rated Values

- Specification by Packaging Code/ Minimum Order Quantity
- Weight (1 pc/ø180mm reel)

### Chart of Characteristic Data

The main products published characteristic data.

- Frequency characteristics (ESR, Impedance)
- DC bias characteristics
- AC voltage characteristics
- Capacitance - temperature characteristics
- Calorific property by ripple current

### Design Tools SimSurfing

The SimSurfing design tools are useful for displaying the graph, downloading CSV data and overwriting the product number graph.

## General Purpose Monolithic Ceramic Capacitors

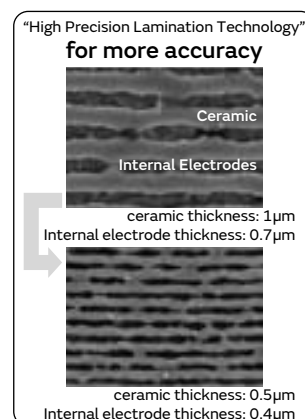
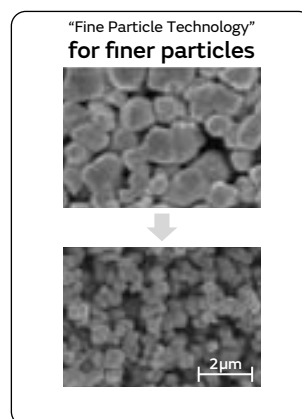
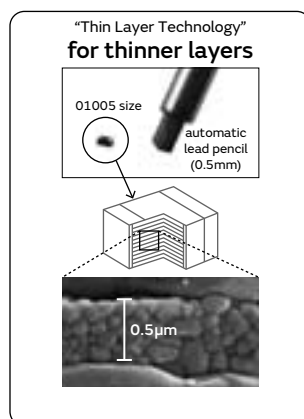
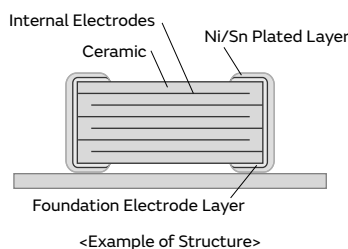
# GRM Series



This is Murata primary products renowned for both small size and large capacitance value with latest advanced technology.

## Features

### ① Achieves large-capacity and small size in a multilayer structure.



### ② Sn plating is applied to the external electrodes; excellent solderability.

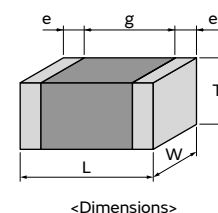
### ③ High reliability with no polarity.

|                                                        | Ceramic Capacitors | Tantalum Capacitor | Aluminum Electrolytic Capacitor | Conductive Polymer Capacitor |
|--------------------------------------------------------|--------------------|--------------------|---------------------------------|------------------------------|
| Price                                                  | ○                  | ○                  | ◎                               | ○                            |
| Comparison between Impedance Frequency Characteristics | ◎                  | △                  | △                               | ○                            |
| Capacitance temperature characteristics                | ○                  | ◎                  | ○                               | ○                            |
| DC breakdown voltage                                   | ◎                  | △                  | △                               | △                            |
| Polarity                                               | No                 | Yes                | Yes                             | Yes                          |
| Pulse response                                         | ◎                  | △                  | △                               | ○                            |
| Allowable ripple current                               | ◎                  | △                  | △                               | △                            |
| Reliability                                            | ◎                  | ○                  | ○                               | ○                            |
| DC bias characteristics                                | △                  | ◎                  | ◎                               | ◎                            |

◎: Particularly excellent ○: Excellent △: Inferior

## Specifications

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Size (mm)         | 0.25×0.125mm to 5.7×5.0mm                                                                                                                                                                                                                                                                                                                                                                                                             |
| Rated Voltage     | 2.5Vdc to 3150Vdc                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Capacitance       | 0.10pF to 330μF                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Main Applications | <p>1. Rated voltage 100V Max.<br/>High Dielectric Constant Type . . . For decoupling and smoothing circuits<br/>Temperature Compensating Type . . . For tuning circuits, oscillating circuits, and high frequency filter circuits</p> <p>2. Rated voltage 200V min.<br/>High Dielectric Constant Type . . . For clamp snubber circuits and smoothing circuits<br/>Temperature Compensating Type . . . Power supply damper snubber</p> |



This catalog contains only a portion of the product lineup.  
Please refer to the capacitor search tool on the Murata Web site for details.

## GRM Series Temperature Compensating Type Part Number List

### 0.4×0.2mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |
|--------|---------------|---------|--------|---------|--------------------|
| 0.22mm | 50Vdc         | COG     | 0.20pF | ±0.05pF | GRM0225C1HR20WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1HR20BA03# |
|        |               |         | 0.30pF | ±0.05pF | GRM0225C1HR30WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1HR30BA03# |
|        |               |         | 0.40pF | ±0.05pF | GRM0225C1HR40WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1HR40BA03# |
|        |               |         | 0.50pF | ±0.05pF | GRM0225C1HR50WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1HR50BA03# |
|        |               |         | 0.60pF | ±0.05pF | GRM0225C1HR60WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1HR60BA03# |
|        |               |         | 0.70pF | ±0.05pF | GRM0225C1HR70WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1HR70BA03# |
|        |               |         | 0.80pF | ±0.05pF | GRM0225C1HR80WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1HR80BA03# |
|        |               |         | 0.90pF | ±0.05pF | GRM0225C1HR90WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1HR90BA03# |
|        |               |         | 1.0pF  | ±0.05pF | GRM0225C1H1R0WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1H1R0BA03# |
|        |               |         |        | ±0.25pF | GRM0225C1H1R0CA03# |
|        |               |         | 1.1pF  | ±0.05pF | GRM0225C1H1R1WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1H1R1BA03# |
|        |               |         |        | ±0.25pF | GRM0225C1H1R1CA03# |
|        |               |         | 1.2pF  | ±0.05pF | GRM0225C1H1R2WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1H1R2BA03# |
|        |               |         |        | ±0.25pF | GRM0225C1H1R2CA03# |
|        |               |         | 1.3pF  | ±0.05pF | GRM0225C1H1R3WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1H1R3BA03# |
|        |               |         |        | ±0.25pF | GRM0225C1H1R3CA03# |
|        |               |         | 1.4pF  | ±0.05pF | GRM0225C1H1R4WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1H1R4BA03# |
|        |               |         |        | ±0.25pF | GRM0225C1H1R4CA03# |
|        |               |         | 1.5pF  | ±0.05pF | GRM0225C1H1R5WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1H1R5BA03# |
|        |               |         |        | ±0.25pF | GRM0225C1H1R5CA03# |
|        |               |         | 1.6pF  | ±0.05pF | GRM0225C1H1R6WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1H1R6BA03# |
|        |               |         |        | ±0.25pF | GRM0225C1H1R6CA03# |
|        |               |         | 1.7pF  | ±0.05pF | GRM0225C1H1R7WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1H1R7BA03# |
|        |               |         |        | ±0.25pF | GRM0225C1H1R7CA03# |
|        |               |         | 1.8pF  | ±0.05pF | GRM0225C1H1R8WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1H1R8BA03# |
|        |               |         |        | ±0.25pF | GRM0225C1H1R8CA03# |
|        |               |         | 1.9pF  | ±0.05pF | GRM0225C1H1R9WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1H1R9BA03# |
|        |               |         |        | ±0.25pF | GRM0225C1H1R9CA03# |
|        |               |         | 2.0pF  | ±0.05pF | GRM0225C1H2R0WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1H2R0BA03# |
|        |               |         |        | ±0.25pF | GRM0225C1H2R0CA03# |
|        |               |         | 2.1pF  | ±0.05pF | GRM0225C1H2R1WA03# |
|        |               |         |        | ±0.1pF  | GRM0225C1H2R1BA03# |
|        |               |         |        | ±0.25pF | GRM0225C1H2R1CA03# |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |
|--------|---------------|---------|-------|---------|--------------------|
| 0.22mm | 50Vdc         | COG     | 2.2pF | ±0.05pF | GRM0225C1H2R2WA03# |
|        |               |         |       | ±0.1pF  | GRM0225C1H2R2BA03# |
|        |               |         |       | ±0.25pF | GRM0225C1H2R2CA03# |
|        |               |         | 2.3pF | ±0.05pF | GRM0225C1H2R3WA03# |
|        |               |         |       | ±0.1pF  | GRM0225C1H2R3BA03# |
|        |               |         |       | ±0.25pF | GRM0225C1H2R3CA03# |
|        |               |         | 2.4pF | ±0.05pF | GRM0225C1H2R4WA03# |
|        |               |         |       | ±0.1pF  | GRM0225C1H2R4BA03# |
|        |               |         |       | ±0.25pF | GRM0225C1H2R4CA03# |
|        |               |         | 2.5pF | ±0.05pF | GRM0225C1H2R5WA03# |
|        |               |         |       | ±0.1pF  | GRM0225C1H2R5BA03# |
|        |               |         |       | ±0.25pF | GRM0225C1H2R5CA03# |
|        |               |         | 2.6pF | ±0.05pF | GRM0225C1H2R6WA03# |
|        |               |         |       | ±0.1pF  | GRM0225C1H2R6BA03# |
|        |               |         |       | ±0.25pF | GRM0225C1H2R6CA03# |
|        |               |         | 2.7pF | ±0.05pF | GRM0225C1H2R7WA03# |
|        |               |         |       | ±0.1pF  | GRM0225C1H2R7BA03# |
|        |               |         |       | ±0.25pF | GRM0225C1H2R7CA03# |
|        |               |         | 2.8pF | ±0.05pF | GRM0225C1H2R8WA03# |
|        |               |         |       | ±0.1pF  | GRM0225C1H2R8BA03# |
|        |               |         |       | ±0.25pF | GRM0225C1H2R8CA03# |
|        |               |         | 2.9pF | ±0.05pF | GRM0225C1H2R9WA03# |
|        |               |         |       | ±0.1pF  | GRM0225C1H2R9BA03# |
|        |               |         |       | ±0.25pF | GRM0225C1H2R9CA03# |
|        |               |         | 3.0pF | ±0.05pF | GRM0225C1H3R0WA03# |
|        |               |         |       | ±0.1pF  | GRM0225C1H3R0BA03# |
|        |               |         |       | ±0.25pF | GRM0225C1H3R0CA03# |
|        |               |         | 3.1pF | ±0.05pF | GRM0225C1H3R1WA03# |
|        |               |         |       | ±0.1pF  | GRM0225C1H3R1BA03# |
|        |               |         |       | ±0.25pF | GRM0225C1H3R1CA03# |
|        |               |         | 3.2pF | ±0.05pF | GRM0225C1H3R2WA03# |
|        |               |         |       | ±0.1pF  | GRM0225C1H3R2BA03# |
|        |               |         |       | ±0.25pF | GRM0225C1H3R2CA03# |
|        |               |         | 3.3pF | ±0.05pF | GRM0225C1H3R3WA03# |
|        |               |         |       | ±0.1pF  | GRM0225C1H3R3BA03# |
|        |               |         |       | ±0.25pF | GRM0225C1H3R3CA03# |
|        |               |         | 3.4pF | ±0.05pF | GRM0225C1H3R4WA03# |
|        |               |         |       | ±0.1pF  | GRM0225C1H3R4BA03# |
|        |               |         |       | ±0.25pF | GRM0225C1H3R4CA03# |
|        |               |         | 3.5pF | ±0.05pF | GRM0225C1H3R5WA03# |
|        |               |         |       | ±0.1pF  | GRM0225C1H3R5BA03# |
|        |               |         |       | ±0.25pF | GRM0225C1H3R5CA03# |
|        |               |         | 3.6pF | ±0.05pF | GRM0225C1H3R6WA03# |
|        |               |         |       | ±0.1pF  | GRM0225C1H3R6BA03# |
|        |               |         |       | ±0.25pF | GRM0225C1H3R6CA03# |
|        |               |         | 3.7pF | ±0.05pF | GRM0225C1H3R7WA03# |
|        |               |         |       | ±0.1pF  | GRM0225C1H3R7BA03# |
|        |               |         |       | ±0.25pF | GRM0225C1H3R7CA03# |
|        |               |         | 3.8pF | ±0.05pF | GRM0225C1H3R8WA03# |
|        |               |         |       | ±0.1pF  | GRM0225C1H3R8BA03# |
|        |               |         |       | ±0.25pF | GRM0225C1H3R8CA03# |
|        |               |         | 3.9pF | ±0.05pF | GRM0225C1H3R9WA03# |
|        |               |         |       | ±0.1pF  | GRM0225C1H3R9BA03# |
|        |               |         |       | ±0.25pF | GRM0225C1H3R9CA03# |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.4×0.2mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.22mm | 50Vdc         | COG     | 4.0pF | ±0.05pF | GRM0225C1H4R0WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H4R0BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H4R0CA03# |  |
|        |               |         | 4.1pF | ±0.05pF | GRM0225C1H4R1WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H4R1BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H4R1CA03# |  |
|        |               |         | 4.2pF | ±0.05pF | GRM0225C1H4R2WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H4R2BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H4R2CA03# |  |
|        |               |         | 4.3pF | ±0.05pF | GRM0225C1H4R3WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H4R3BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H4R3CA03# |  |
|        |               |         | 4.4pF | ±0.05pF | GRM0225C1H4R4WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H4R4BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H4R4CA03# |  |
|        |               |         | 4.5pF | ±0.05pF | GRM0225C1H4R5WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H4R5BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H4R5CA03# |  |
|        |               |         | 4.6pF | ±0.05pF | GRM0225C1H4R6WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H4R6BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H4R6CA03# |  |
|        |               |         | 4.7pF | ±0.05pF | GRM0225C1H4R7WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H4R7BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H4R7CA03# |  |
|        |               |         | 4.8pF | ±0.05pF | GRM0225C1H4R8WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H4R8BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H4R8CA03# |  |
|        |               |         | 4.9pF | ±0.05pF | GRM0225C1H4R9WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H4R9BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H4R9CA03# |  |
|        |               |         | 5.0pF | ±0.05pF | GRM0225C1H5R0WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H5R0BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H5R0CA03# |  |
|        |               |         | 5.1pF | ±0.05pF | GRM0225C1H5R1WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H5R1BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H5R1CA03# |  |
|        |               |         | 5.2pF | ±0.05pF | GRM0225C1H5R2WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H5R2BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H5R2CA03# |  |
|        |               |         | 5.3pF | ±0.05pF | GRM0225C1H5R3WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H5R3BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H5R3CA03# |  |
|        |               |         | 5.4pF | ±0.05pF | GRM0225C1H5R4WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H5R4BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H5R4CA03# |  |
|        |               |         | 5.5pF | ±0.05pF | GRM0225C1H5R5WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H5R5BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H5R5CA03# |  |
|        |               |         | 5.6pF | ±0.05pF | GRM0225C1H5R5DA03# |  |
|        |               |         |       | ±0.05pF | GRM0225C1H5R6WA03# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.22mm | 50Vdc         | COG     | 5.6pF | ±0.1pF  | GRM0225C1H5R6BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H5R6CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0225C1H5R6DA03# |  |
|        |               |         | 5.7pF | ±0.05pF | GRM0225C1H5R7WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H5R7BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H5R7CA03# |  |
|        |               |         | 5.8pF | ±0.05pF | GRM0225C1H5R8WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H5R8BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H5R8CA03# |  |
|        |               |         | 5.9pF | ±0.05pF | GRM0225C1H5R9WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H5R9BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H5R9CA03# |  |
|        |               |         | 6.0pF | ±0.05pF | GRM0225C1H6R0WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H6R0BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H6R0CA03# |  |
|        |               |         | 6.1pF | ±0.05pF | GRM0225C1H6R1WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H6R1BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H6R1CA03# |  |
|        |               |         | 6.2pF | ±0.05pF | GRM0225C1H6R2WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H6R2BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H6R2CA03# |  |
|        |               |         | 6.3pF | ±0.05pF | GRM0225C1H6R3WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H6R3BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H6R3CA03# |  |
|        |               |         | 6.4pF | ±0.05pF | GRM0225C1H6R4WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H6R4BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H6R4CA03# |  |
|        |               |         | 6.5pF | ±0.05pF | GRM0225C1H6R5WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H6R5BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H6R5CA03# |  |
|        |               |         | 6.6pF | ±0.05pF | GRM0225C1H6R6WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H6R6BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H6R6CA03# |  |
|        |               |         | 6.7pF | ±0.05pF | GRM0225C1H6R7WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H6R7BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H6R7CA03# |  |
|        |               |         | 6.8pF | ±0.05pF | GRM0225C1H6R8WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H6R8BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H6R8CA03# |  |
|        |               |         | 6.9pF | ±0.05pF | GRM0225C1H6R9WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H6R9BA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H6R9CA03# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.4×0.2mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 0.22mm | 50Vdc         | COG     | 6.9pF | ±0.5pF  | GRM0225C1H6R9DA03# |  | 0.22mm | 50Vdc         | COG     | 8.3pF | ±0.1pF  | GRM0225C1H8R3BA03# |  |
|        |               |         |       | ±0.05pF | GRM0225C1H7R0WA03# |  |        |               |         |       | ±0.25pF | GRM0225C1H8R3CA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H7R0BA03# |  |        |               |         |       | ±0.5pF  | GRM0225C1H8R3DA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H7R0CA03# |  |        |               |         | 8.4pF | ±0.05pF | GRM0225C1H8R4WA03# |  |
|        |               |         |       | ±0.5pF  | GRM0225C1H7R0DA03# |  |        |               |         |       | ±0.1pF  | GRM0225C1H8R4BA03# |  |
|        |               |         | 7.1pF | ±0.05pF | GRM0225C1H7R1WA03# |  |        |               |         |       | ±0.25pF | GRM0225C1H8R4CA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H7R1BA03# |  |        |               |         |       | ±0.5pF  | GRM0225C1H8R4DA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H7R1CA03# |  |        |               |         | 8.5pF | ±0.05pF | GRM0225C1H8R5WA03# |  |
|        |               |         |       | ±0.5pF  | GRM0225C1H7R1DA03# |  |        |               |         |       | ±0.1pF  | GRM0225C1H8R5BA03# |  |
|        |               |         | 7.2pF | ±0.05pF | GRM0225C1H7R2WA03# |  |        |               |         |       | ±0.25pF | GRM0225C1H8R5CA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H7R2BA03# |  |        |               |         |       | ±0.5pF  | GRM0225C1H8R5DA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H7R2CA03# |  |        |               |         | 8.6pF | ±0.05pF | GRM0225C1H8R6WA03# |  |
|        |               |         |       | ±0.5pF  | GRM0225C1H7R2DA03# |  |        |               |         |       | ±0.1pF  | GRM0225C1H8R6BA03# |  |
|        |               |         |       | ±0.05pF | GRM0225C1H7R3WA03# |  |        |               |         |       | ±0.25pF | GRM0225C1H8R6CA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H7R3BA03# |  |        |               |         |       | ±0.5pF  | GRM0225C1H8R6DA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H7R3CA03# |  |        |               |         | 8.7pF | ±0.05pF | GRM0225C1H8R7WA03# |  |
|        |               |         |       | ±0.5pF  | GRM0225C1H7R3DA03# |  |        |               |         |       | ±0.1pF  | GRM0225C1H8R7BA03# |  |
|        |               |         | 7.4pF | ±0.05pF | GRM0225C1H7R4WA03# |  |        |               |         |       | ±0.25pF | GRM0225C1H8R7CA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H7R4BA03# |  |        |               |         |       | ±0.5pF  | GRM0225C1H8R7DA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H7R4CA03# |  |        |               |         | 8.8pF | ±0.05pF | GRM0225C1H8R8WA03# |  |
|        |               |         |       | ±0.5pF  | GRM0225C1H7R4DA03# |  |        |               |         |       | ±0.1pF  | GRM0225C1H8R8BA03# |  |
|        |               |         | 7.5pF | ±0.05pF | GRM0225C1H7R5WA03# |  |        |               |         |       | ±0.25pF | GRM0225C1H8R8CA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H7R5BA03# |  |        |               |         |       | ±0.5pF  | GRM0225C1H8R8DA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H7R5CA03# |  |        |               |         | 8.9pF | ±0.05pF | GRM0225C1H8R9WA03# |  |
|        |               |         |       | ±0.5pF  | GRM0225C1H7R5DA03# |  |        |               |         |       | ±0.1pF  | GRM0225C1H8R9BA03# |  |
|        |               |         | 7.6pF | ±0.05pF | GRM0225C1H7R6WA03# |  |        |               |         |       | ±0.25pF | GRM0225C1H8R9CA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H7R6BA03# |  |        |               |         |       | ±0.5pF  | GRM0225C1H8R9DA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H7R6CA03# |  |        |               |         | 9.0pF | ±0.05pF | GRM0225C1H9R0WA03# |  |
|        |               |         |       | ±0.5pF  | GRM0225C1H7R6DA03# |  |        |               |         |       | ±0.1pF  | GRM0225C1H9R0BA03# |  |
|        |               |         | 7.7pF | ±0.05pF | GRM0225C1H7R7WA03# |  |        |               |         |       | ±0.25pF | GRM0225C1H9R0CA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H7R7BA03# |  |        |               |         |       | ±0.5pF  | GRM0225C1H9R0DA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H7R7CA03# |  |        |               |         | 9.1pF | ±0.05pF | GRM0225C1H9R1WA03# |  |
|        |               |         |       | ±0.5pF  | GRM0225C1H7R7DA03# |  |        |               |         |       | ±0.1pF  | GRM0225C1H9R1BA03# |  |
|        |               |         | 7.8pF | ±0.05pF | GRM0225C1H7R8WA03# |  |        |               |         |       | ±0.25pF | GRM0225C1H9R1CA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H7R8BA03# |  |        |               |         |       | ±0.5pF  | GRM0225C1H9R1DA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H7R8CA03# |  |        |               |         | 9.2pF | ±0.05pF | GRM0225C1H9R2WA03# |  |
|        |               |         |       | ±0.5pF  | GRM0225C1H7R8DA03# |  |        |               |         |       | ±0.1pF  | GRM0225C1H9R2BA03# |  |
|        |               |         | 7.9pF | ±0.05pF | GRM0225C1H7R9WA03# |  |        |               |         |       | ±0.25pF | GRM0225C1H9R2CA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H7R9BA03# |  |        |               |         |       | ±0.5pF  | GRM0225C1H9R2DA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H7R9CA03# |  |        |               |         | 9.3pF | ±0.05pF | GRM0225C1H9R3WA03# |  |
|        |               |         |       | ±0.5pF  | GRM0225C1H7R9DA03# |  |        |               |         |       | ±0.1pF  | GRM0225C1H9R3BA03# |  |
|        |               |         | 8.0pF | ±0.05pF | GRM0225C1H8R0WA03# |  |        |               |         |       | ±0.25pF | GRM0225C1H9R3CA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H8R0BA03# |  |        |               |         |       | ±0.5pF  | GRM0225C1H9R3DA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H8R0CA03# |  |        |               |         | 9.4pF | ±0.05pF | GRM0225C1H9R4WA03# |  |
|        |               |         |       | ±0.5pF  | GRM0225C1H8R0DA03# |  |        |               |         |       | ±0.1pF  | GRM0225C1H9R4BA03# |  |
|        |               |         | 8.1pF | ±0.05pF | GRM0225C1H8R1WA03# |  |        |               |         |       | ±0.25pF | GRM0225C1H9R4CA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H8R1BA03# |  |        |               |         |       | ±0.5pF  | GRM0225C1H9R4DA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H8R1CA03# |  |        |               |         | 9.5pF | ±0.05pF | GRM0225C1H9R5WA03# |  |
|        |               |         |       | ±0.5pF  | GRM0225C1H8R1DA03# |  |        |               |         |       | ±0.1pF  | GRM0225C1H9R5BA03# |  |
|        |               |         | 8.2pF | ±0.05pF | GRM0225C1H8R2WA03# |  |        |               |         |       | ±0.25pF | GRM0225C1H9R5CA03# |  |
|        |               |         |       | ±0.1pF  | GRM0225C1H8R2BA03# |  |        |               |         |       | ±0.5pF  | GRM0225C1H9R5DA03# |  |
|        |               |         |       | ±0.25pF | GRM0225C1H8R2CA03# |  |        |               |         | 9.6pF | ±0.05pF | GRM0225C1H9R6WA03# |  |
|        |               |         |       | ±0.5pF  | GRM0225C1H8R2DA03# |  |        |               |         |       | ±0.1pF  | GRM0225C1H9R6BA03# |  |
|        |               |         |       | ±0.05pF | GRM0225C1H8R3WA03# |  |        |               |         |       | ±0.25pF | GRM0225C1H9R6CA03# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.4×0.2mm)

| T max. | Rated Voltage | TC Code | Cap.    | Tol.               | Part Number        |                    | T max. | Rated Voltage | TC Code | Cap.    | Tol.               | Part Number        |                    |
|--------|---------------|---------|---------|--------------------|--------------------|--------------------|--------|---------------|---------|---------|--------------------|--------------------|--------------------|
| 0.22mm | 50Vdc         | COG     | 9.6pF   | ±0.5pF             | GRM0225C1H9R6DA03# |                    | 0.22mm | 50Vdc         | CK      | 0.50pF  | ±0.05pF            | GRM0224C1HR50WA03# |                    |
|        |               |         | 9.7pF   | ±0.05pF            | GRM0225C1H9R7WA03# |                    |        |               |         |         | ±0.1pF             | GRM0224C1HR50BA03# |                    |
|        |               |         |         | ±0.1pF             | GRM0225C1H9R7BA03# |                    |        |               |         | 0.51pF  | ±0.05pF            | GRM0224C1HR51WA03# |                    |
|        |               |         |         | ±0.25pF            | GRM0225C1H9R7CA03# |                    |        |               |         | 0.60pF  | ±0.05pF            | GRM0224C1HR60WA03# |                    |
|        |               |         |         | ±0.5pF             | GRM0225C1H9R7DA03# |                    |        |               |         |         | ±0.1pF             | GRM0224C1HR60BA03# |                    |
|        |               |         |         | 9.8pF              | ±0.05pF            | GRM0225C1H9R8WA03# |        |               |         |         | 0.70pF             | ±0.05pF            | GRM0224C1HR70WA03# |
|        |               |         | ±0.1pF  |                    | GRM0225C1H9R8BA03# |                    |        |               |         |         | ±0.1pF             | GRM0224C1HR70BA03# |                    |
|        |               |         | ±0.25pF |                    | GRM0225C1H9R8CA03# |                    |        |               |         | 0.80pF  | ±0.05pF            | GRM0224C1HR80WA03# |                    |
|        |               |         | ±0.5pF  |                    | GRM0225C1H9R8DA03# |                    |        |               |         |         | ±0.1pF             | GRM0224C1HR80BA03# |                    |
|        |               |         | 9.9pF   | ±0.05pF            | GRM0225C1H9R9WA03# |                    |        |               |         | 0.90pF  | ±0.05pF            | GRM0224C1HR90WA03# |                    |
|        |               |         |         | ±0.1pF             | GRM0225C1H9R9BA03# |                    |        |               |         |         | ±0.1pF             | GRM0224C1HR90BA03# |                    |
|        |               |         |         | ±0.25pF            | GRM0225C1H9R9CA03# |                    |        |               |         | 1.0pF   | ±0.05pF            | GRM0224C1H1R0WA03# |                    |
|        |               |         |         | ±0.5pF             | GRM0225C1H9R9DA03# |                    |        |               |         |         | ±0.1pF             | GRM0224C1H1R0BA03# |                    |
|        |               |         | 10pF    | ±2%                | GRM0225C1H100GA03# |                    |        |               |         |         | ±0.25pF            | GRM0224C1H1R0CA03# |                    |
|        |               |         |         | ±5%                | GRM0225C1H100JA03# |                    |        |               |         | 1.1pF   | ±0.05pF            | GRM0224C1H1R1WA03# |                    |
|        |               |         | 11pF    | ±2%                | GRM0225C1H110GA03# |                    |        |               |         |         | ±0.1pF             | GRM0224C1H1R1BA03# |                    |
|        |               |         |         | ±5%                | GRM0225C1H110JA03# |                    |        |               |         |         | ±0.25pF            | GRM0224C1H1R1CA03# |                    |
|        |               |         | 12pF    | ±2%                | GRM0225C1H120GA03# |                    |        |               |         | 1.2pF   | ±0.05pF            | GRM0224C1H1R2WA03# |                    |
|        |               |         |         | ±5%                | GRM0225C1H120JA03# |                    |        |               |         |         | ±0.1pF             | GRM0224C1H1R2BA03# |                    |
|        |               |         | 13pF    | ±2%                | GRM0225C1H130GA03# |                    |        |               |         |         | ±0.25pF            | GRM0224C1H1R2CA03# |                    |
|        |               |         |         | ±5%                | GRM0225C1H130JA03# |                    |        |               |         | 1.3pF   | ±0.05pF            | GRM0224C1H1R3WA03# |                    |
|        |               |         | 15pF    | ±2%                | GRM0225C1H150GA03# |                    |        |               |         |         | ±0.1pF             | GRM0224C1H1R3BA03# |                    |
|        |               |         |         | ±5%                | GRM0225C1H150JA03# |                    |        |               |         |         | ±0.25pF            | GRM0224C1H1R3CA03# |                    |
|        |               |         | 16pF    | ±2%                | GRM0225C1H160GA03# |                    |        |               |         | 1.4pF   | ±0.05pF            | GRM0224C1H1R4WA03# |                    |
|        |               |         |         | ±5%                | GRM0225C1H160JA03# |                    |        |               |         |         | ±0.1pF             | GRM0224C1H1R4BA03# |                    |
|        |               |         | 17pF    | ±5%                | GRM0225C1H170JA02# |                    |        |               |         |         | ±0.25pF            | GRM0224C1H1R4CA03# |                    |
|        |               |         | 18pF    | ±5%                | GRM0225C1H180JA02# |                    |        |               |         | 1.5pF   | ±0.05pF            | GRM0224C1H1R5WA03# |                    |
|        |               |         | 19pF    | ±5%                | GRM0225C1H190JA02# |                    |        |               |         |         | ±0.1pF             | GRM0224C1H1R5BA03# |                    |
|        |               |         | 20pF    | ±5%                | GRM0225C1H200JA02# |                    |        |               |         |         | ±0.25pF            | GRM0224C1H1R5CA03# |                    |
|        |               |         | 21pF    | ±5%                | GRM0225C1H210JA02# |                    |        |               |         | 1.6pF   | ±0.05pF            | GRM0224C1H1R6WA03# |                    |
|        |               |         | 22pF    | ±5%                | GRM0225C1H220JA02# |                    |        |               |         |         | ±0.1pF             | GRM0224C1H1R6BA03# |                    |
|        |               |         | 23pF    | ±5%                | GRM0225C1H230JA02# |                    |        |               |         |         | ±0.25pF            | GRM0224C1H1R6CA03# |                    |
|        |               |         | 24pF    | ±5%                | GRM0225C1H240JA02# |                    |        |               |         | 1.7pF   | ±0.05pF            | GRM0224C1H1R7WA03# |                    |
|        |               |         | 27pF    | ±5%                | GRM0225C1H270JA02# |                    |        |               |         |         | ±0.1pF             | GRM0224C1H1R7BA03# |                    |
|        |               |         | 30pF    | ±5%                | GRM0225C1H300JA02# |                    |        |               |         |         | ±0.25pF            | GRM0224C1H1R7CA03# |                    |
|        |               |         | 33pF    | ±5%                | GRM0225C1H330JA02# |                    |        |               |         | 1.8pF   | ±0.05pF            | GRM0224C1H1R8WA03# |                    |
|        |               |         | 36pF    | ±5%                | GRM0225C1H360JA02# |                    |        |               |         |         | ±0.1pF             | GRM0224C1H1R8BA03# |                    |
|        |               |         | 39pF    | ±5%                | GRM0225C1H390JA02# |                    |        |               |         |         | ±0.25pF            | GRM0224C1H1R8CA03# |                    |
|        |               |         | 43pF    | ±5%                | GRM0225C1H430JA02# |                    |        |               |         | 1.9pF   | ±0.05pF            | GRM0224C1H1R9WA03# |                    |
|        |               |         | 47pF    | ±5%                | GRM0225C1H470JA02# |                    |        |               |         |         | ±0.1pF             | GRM0224C1H1R9BA03# |                    |
|        |               |         | 51pF    | ±5%                | GRM0225C1H510JA02# |                    |        |               |         |         | ±0.25pF            | GRM0224C1H1R9CA03# |                    |
|        |               |         | 56pF    | ±5%                | GRM0225C1H560JA02# |                    |        |               |         | 2.0pF   | ±0.05pF            | GRM0224C1H2R0WA03# |                    |
|        |               |         | 62pF    | ±5%                | GRM0225C1H620JA02# |                    |        |               |         |         | ±0.1pF             | GRM0224C1H2R0BA03# |                    |
|        |               |         | 68pF    | ±5%                | GRM0225C1H680JA02# |                    |        |               |         |         | ±0.25pF            | GRM0224C1H2R0CA03# |                    |
|        |               | 75pF    | ±5%     | GRM0225C1H750JA02# |                    | CJ                 |        |               | 2.1pF   | ±0.05pF | GRM0223C1H2R1WA03# |                    |                    |
|        |               | 82pF    | ±5%     | GRM0225C1H820JA02# |                    |                    |        |               |         | ±0.1pF  | GRM0223C1H2R1BA03# |                    |                    |
|        |               | 91pF    | ±5%     | GRM0225C1H910JA02# |                    |                    |        |               |         | ±0.25pF | GRM0223C1H2R1CA03# |                    |                    |
|        |               | 100pF   | ±5%     | GRM0225C1H101JA02# |                    |                    |        |               | 2.2pF   | ±0.05pF | GRM0223C1H2R2WA03# |                    |                    |
|        |               | 0.20pF  | ±0.05pF | GRM0224C1HR20WA03# |                    |                    |        |               |         | ±0.1pF  | GRM0223C1H2R2BA03# |                    |                    |
|        |               |         | ±0.1pF  | GRM0224C1HR20BA03# |                    |                    |        |               |         | ±0.25pF | GRM0223C1H2R2CA03# |                    |                    |
|        |               | 0.30pF  | ±0.05pF | GRM0224C1HR30WA03# |                    |                    |        |               | 2.3pF   | ±0.05pF | GRM0223C1H2R3WA03# |                    |                    |
|        |               |         | ±0.1pF  | GRM0224C1HR30BA03# |                    |                    |        |               |         | ±0.1pF  | GRM0223C1H2R3BA03# |                    |                    |
|        |               | 0.40pF  | ±0.05pF | GRM0224C1HR40WA03# |                    |                    |        |               |         | ±0.25pF | GRM0223C1H2R3CA03# |                    |                    |
|        |               |         | ±0.1pF  | GRM0224C1HR40BA03# |                    |                    |        |               | 2.4pF   | ±0.05pF | GRM0223C1H2R4WA03# |                    |                    |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.4×0.2mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 0.22mm | 50Vdc         | CJ      | 2.4pF | ±0.1pF  | GRM0223C1H2R4BA03# |  | 0.22mm | 50Vdc         | CH      | 4.2pF | ±0.1pF  | GRM0222C1H4R2BA03# |  |
|        |               |         |       | ±0.25pF | GRM0223C1H2R4CA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H4R2CA03# |  |
|        |               |         | 2.5pF | ±0.05pF | GRM0223C1H2R5WA03# |  |        |               |         | 4.3pF | ±0.05pF | GRM0222C1H4R3WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0223C1H2R5BA03# |  |        |               |         |       | ±0.1pF  | GRM0222C1H4R3BA03# |  |
|        |               |         |       | ±0.25pF | GRM0223C1H2R5CA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H4R3CA03# |  |
|        |               |         | 2.6pF | ±0.05pF | GRM0223C1H2R6WA03# |  |        |               |         | 4.4pF | ±0.05pF | GRM0222C1H4R4WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0223C1H2R6BA03# |  |        |               |         |       | ±0.1pF  | GRM0222C1H4R4BA03# |  |
|        |               |         |       | ±0.25pF | GRM0223C1H2R6CA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H4R4CA03# |  |
|        |               |         | 2.7pF | ±0.05pF | GRM0223C1H2R7WA03# |  |        |               |         | 4.5pF | ±0.05pF | GRM0222C1H4R5WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0223C1H2R7BA03# |  |        |               |         |       | ±0.1pF  | GRM0222C1H4R5BA03# |  |
|        |               |         |       | ±0.25pF | GRM0223C1H2R7CA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H4R5CA03# |  |
|        |               |         | 2.8pF | ±0.05pF | GRM0223C1H2R8WA03# |  |        |               |         | 4.6pF | ±0.05pF | GRM0222C1H4R6WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0223C1H2R8BA03# |  |        |               |         |       | ±0.1pF  | GRM0222C1H4R6BA03# |  |
|        |               |         |       | ±0.25pF | GRM0223C1H2R8CA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H4R6CA03# |  |
|        |               |         | 2.9pF | ±0.05pF | GRM0223C1H2R9WA03# |  |        |               |         | 4.7pF | ±0.05pF | GRM0222C1H4R7WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0223C1H2R9BA03# |  |        |               |         |       | ±0.1pF  | GRM0222C1H4R7BA03# |  |
|        |               |         |       | ±0.25pF | GRM0223C1H2R9CA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H4R7CA03# |  |
|        |               |         | 3.0pF | ±0.05pF | GRM0223C1H3R0WA03# |  |        |               |         | 4.8pF | ±0.05pF | GRM0222C1H4R8WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0223C1H3R0BA03# |  |        |               |         |       | ±0.1pF  | GRM0222C1H4R8BA03# |  |
|        |               |         |       | ±0.25pF | GRM0223C1H3R0CA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H4R8CA03# |  |
|        |               |         | 3.1pF | ±0.05pF | GRM0223C1H3R1WA03# |  |        |               |         | 4.9pF | ±0.05pF | GRM0222C1H4R9WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0223C1H3R1BA03# |  |        |               |         |       | ±0.1pF  | GRM0222C1H4R9BA03# |  |
|        |               |         |       | ±0.25pF | GRM0223C1H3R1CA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H4R9CA03# |  |
|        |               |         | 3.2pF | ±0.05pF | GRM0223C1H3R2WA03# |  |        |               |         | 5.0pF | ±0.05pF | GRM0222C1H5R0WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0223C1H3R2BA03# |  |        |               |         |       | ±0.1pF  | GRM0222C1H5R0BA03# |  |
|        |               |         |       | ±0.25pF | GRM0223C1H3R2CA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H5R0CA03# |  |
|        |               |         | 3.3pF | ±0.05pF | GRM0223C1H3R3WA03# |  |        |               |         | 5.1pF | ±0.05pF | GRM0222C1H5R1WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0223C1H3R3BA03# |  |        |               |         |       | ±0.1pF  | GRM0222C1H5R1BA03# |  |
|        |               |         |       | ±0.25pF | GRM0223C1H3R3CA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H5R1CA03# |  |
|        |               |         | 3.4pF | ±0.05pF | GRM0223C1H3R4WA03# |  |        |               |         | 5.2pF | ±0.05pF | GRM0222C1H5R2WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0223C1H3R4BA03# |  |        |               |         |       | ±0.1pF  | GRM0222C1H5R2BA03# |  |
|        |               |         |       | ±0.25pF | GRM0223C1H3R4CA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H5R2CA03# |  |
|        |               |         | 3.5pF | ±0.05pF | GRM0223C1H3R5WA03# |  |        |               |         | 5.3pF | ±0.05pF | GRM0222C1H5R3WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0223C1H3R5BA03# |  |        |               |         |       | ±0.1pF  | GRM0222C1H5R3BA03# |  |
|        |               |         |       | ±0.25pF | GRM0223C1H3R5CA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H5R3CA03# |  |
|        |               |         | 3.6pF | ±0.05pF | GRM0223C1H3R6WA03# |  |        |               |         | 5.4pF | ±0.05pF | GRM0222C1H5R4WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0223C1H3R6BA03# |  |        |               |         |       | ±0.1pF  | GRM0222C1H5R4BA03# |  |
|        |               |         |       | ±0.25pF | GRM0223C1H3R6CA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H5R4CA03# |  |
|        |               |         | 3.7pF | ±0.05pF | GRM0223C1H3R7WA03# |  |        |               |         | 5.5pF | ±0.05pF | GRM0222C1H5R5WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0223C1H3R7BA03# |  |        |               |         |       | ±0.1pF  | GRM0222C1H5R5BA03# |  |
|        |               |         |       | ±0.25pF | GRM0223C1H3R7CA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H5R5CA03# |  |
|        |               |         | 3.8pF | ±0.05pF | GRM0223C1H3R8WA03# |  |        |               |         | 5.6pF | ±0.05pF | GRM0222C1H5R6WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0223C1H3R8BA03# |  |        |               |         |       | ±0.1pF  | GRM0222C1H5R6BA03# |  |
|        |               |         |       | ±0.25pF | GRM0223C1H3R8CA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H5R6CA03# |  |
|        |               |         | 3.9pF | ±0.05pF | GRM0223C1H3R9WA03# |  |        |               |         | 5.7pF | ±0.05pF | GRM0222C1H5R7WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0223C1H3R9BA03# |  |        |               |         |       | ±0.1pF  | GRM0222C1H5R7BA03# |  |
|        |               |         |       | ±0.25pF | GRM0223C1H3R9CA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H5R7CA03# |  |
|        |               | CH      | 4.0pF | ±0.05pF | GRM0222C1H4R0WA03# |  |        |               |         | 5.8pF | ±0.05pF | GRM0222C1H5R8WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H4R0BA03# |  |        |               |         |       | ±0.1pF  | GRM0222C1H5R8BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H4R0CA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H5R8CA03# |  |
|        |               |         | 4.1pF | ±0.05pF | GRM0222C1H4R1WA03# |  |        |               |         | 5.9pF | ±0.05pF | GRM0222C1H5R9WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H4R1BA03# |  |        |               |         |       | ±0.1pF  | GRM0222C1H5R9BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H4R1CA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H5R9CA03# |  |
|        |               |         | 4.2pF | ±0.05pF | GRM0222C1H4R2WA03# |  |        |               |         | 6.0pF | ±0.05pF | GRM0222C1H6R0WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H4R2BA03# |  |        |               |         |       | ±0.1pF  | GRM0222C1H6R0BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H4R2CA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H6R0CA03# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.4×0.2mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.22mm | 50Vdc         | CH      | 5.8pF | ±0.05pF | GRM0222C1H5R8WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H5R8BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H5R8CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H5R8DA03# |  |
|        |               |         | 5.9pF | ±0.05pF | GRM0222C1H5R9WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H5R9BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H5R9CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H5R9DA03# |  |
|        |               |         | 6.0pF | ±0.05pF | GRM0222C1H6R0WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H6R0BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H6R0CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H6R0DA03# |  |
|        |               |         | 6.1pF | ±0.05pF | GRM0222C1H6R1WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H6R1BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H6R1CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H6R1DA03# |  |
|        |               |         | 6.2pF | ±0.05pF | GRM0222C1H6R2WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H6R2BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H6R2CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H6R2DA03# |  |
|        |               |         | 6.3pF | ±0.05pF | GRM0222C1H6R3WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H6R3BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H6R3CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H6R3DA03# |  |
|        |               |         | 6.4pF | ±0.05pF | GRM0222C1H6R4WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H6R4BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H6R4CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H6R4DA03# |  |
|        |               |         | 6.5pF | ±0.05pF | GRM0222C1H6R5WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H6R5BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H6R5CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H6R5DA03# |  |
|        |               |         | 6.6pF | ±0.05pF | GRM0222C1H6R6WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H6R6BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H6R6CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H6R6DA03# |  |
|        |               |         | 6.7pF | ±0.05pF | GRM0222C1H6R7WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H6R7BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H6R7CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H6R7DA03# |  |
|        |               |         | 6.8pF | ±0.05pF | GRM0222C1H6R8WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H6R8BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H6R8CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H6R8DA03# |  |
|        |               |         | 6.9pF | ±0.05pF | GRM0222C1H6R9WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H6R9BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H6R9CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H6R9DA03# |  |
|        |               |         | 7.0pF | ±0.05pF | GRM0222C1H7R0WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H7R0BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H7R0CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H7R0DA03# |  |
|        |               |         | 7.1pF | ±0.05pF | GRM0222C1H7R1WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H7R1BA03# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.22mm | 50Vdc         | CH      | 7.1pF | ±0.25pF | GRM0222C1H7R1CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H7R1DA03# |  |
|        |               |         | 7.2pF | ±0.05pF | GRM0222C1H7R2WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H7R2BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H7R2CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H7R2DA03# |  |
|        |               |         | 7.3pF | ±0.05pF | GRM0222C1H7R3WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H7R3BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H7R3CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H7R3DA03# |  |
|        |               |         | 7.4pF | ±0.05pF | GRM0222C1H7R4WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H7R4BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H7R4CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H7R4DA03# |  |
|        |               |         | 7.5pF | ±0.05pF | GRM0222C1H7R5WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H7R5BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H7R5CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H7R5DA03# |  |
|        |               |         | 7.6pF | ±0.05pF | GRM0222C1H7R6WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H7R6BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H7R6CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H7R6DA03# |  |
|        |               |         | 7.7pF | ±0.05pF | GRM0222C1H7R7WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H7R7BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H7R7CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H7R7DA03# |  |
|        |               |         | 7.8pF | ±0.05pF | GRM0222C1H7R8WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H7R8BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H7R8CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H7R8DA03# |  |
|        |               |         | 7.9pF | ±0.05pF | GRM0222C1H7R9WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H7R9BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H7R9CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H7R9DA03# |  |
|        |               |         | 8.0pF | ±0.05pF | GRM0222C1H8R0WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H8R0BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H8R0CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H8R0DA03# |  |
|        |               |         | 8.1pF | ±0.05pF | GRM0222C1H8R1WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H8R1BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H8R1CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H8R1DA03# |  |
|        |               |         | 8.2pF | ±0.05pF | GRM0222C1H8R2WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H8R2BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H8R2CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H8R2DA03# |  |
|        |               |         | 8.3pF | ±0.05pF | GRM0222C1H8R3WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H8R3BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H8R3CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H8R3DA03# |  |
|        |               |         | 8.4pF | ±0.05pF | GRM0222C1H8R4WA03# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H8R4BA03# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H8R4CA03# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H8R4DA03# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.4×0.2mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |     |                    |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|-----|--------------------|--|
| 0.22mm | 50Vdc         | CH      | 8.5pF | ±0.05pF | GRM0222C1H8R5WA03# |  | 0.22mm | 50Vdc         | CH      | 9.8pF | ±0.25pF | GRM0222C1H9R8CA03# |     |                    |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H8R5BA03# |  |        |               |         |       | ±0.5pF  | GRM0222C1H9R8DA03# |     |                    |  |
|        |               |         |       | ±0.25pF | GRM0222C1H8R5CA03# |  |        |               |         | 9.9pF | ±0.05pF | GRM0222C1H9R9WA03# |     |                    |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H8R5DA03# |  |        |               |         |       | ±0.1pF  | GRM0222C1H9R9BA03# |     |                    |  |
|        |               |         | 8.6pF | ±0.05pF | GRM0222C1H8R6WA03# |  |        |               |         |       | ±0.25pF | GRM0222C1H9R9CA03# |     |                    |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H8R6BA03# |  |        |               |         |       | ±0.5pF  | GRM0222C1H9R9DA03# |     |                    |  |
|        |               |         |       | ±0.25pF | GRM0222C1H8R6CA03# |  |        |               |         | 10pF  | ±2%     | GRM0222C1H100GA03# |     |                    |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H8R6DA03# |  |        |               |         |       | ±5%     | GRM0222C1H100JA03# |     |                    |  |
|        |               |         | 8.7pF | ±0.05pF | GRM0222C1H8R7WA03# |  |        |               |         | 11pF  | ±2%     | GRM0222C1H110GA03# |     |                    |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H8R7BA03# |  |        |               |         |       | ±5%     | GRM0222C1H110JA03# |     |                    |  |
|        |               |         |       | ±0.25pF | GRM0222C1H8R7CA03# |  |        |               |         | 12pF  | ±2%     | GRM0222C1H120GA03# |     |                    |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H8R7DA03# |  |        |               |         |       | ±5%     | GRM0222C1H120JA03# |     |                    |  |
|        |               |         | 8.8pF | ±0.05pF | GRM0222C1H8R8WA03# |  |        |               |         | 13pF  | ±2%     | GRM0222C1H130GA03# |     |                    |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H8R8BA03# |  |        |               |         |       | ±5%     | GRM0222C1H130JA03# |     |                    |  |
|        |               |         |       | ±0.25pF | GRM0222C1H8R8CA03# |  |        |               |         | 15pF  | ±2%     | GRM0222C1H150GA03# |     |                    |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H8R8DA03# |  |        |               |         |       | ±5%     | GRM0222C1H150JA03# |     |                    |  |
|        |               |         | 8.9pF | ±0.05pF | GRM0222C1H8R9WA03# |  |        |               |         | 16pF  | ±2%     | GRM0222C1H160GA03# |     |                    |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H8R9BA03# |  |        |               |         |       | ±5%     | GRM0222C1H160JA03# |     |                    |  |
|        |               |         |       | ±0.25pF | GRM0222C1H8R9CA03# |  |        |               |         | 17pF  | ±5%     | GRM0222C1H170JA02# |     |                    |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H8R9DA03# |  |        |               |         | 18pF  | ±5%     | GRM0222C1H180JA02# |     |                    |  |
|        |               |         | 9.0pF | ±0.05pF | GRM0222C1H9R0WA03# |  |        |               |         | 19pF  | ±5%     | GRM0222C1H190JA02# |     |                    |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H9R0BA03# |  |        |               |         | 20pF  | ±5%     | GRM0222C1H200JA02# |     |                    |  |
|        |               |         |       | ±0.25pF | GRM0222C1H9R0CA03# |  |        |               |         | 21pF  | ±5%     | GRM0222C1H210JA02# |     |                    |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H9R0DA03# |  |        |               |         | 22pF  | ±5%     | GRM0222C1H220JA02# |     |                    |  |
|        |               |         | 9.1pF | ±0.05pF | GRM0222C1H9R1WA03# |  |        |               |         | 23pF  | ±5%     | GRM0222C1H230JA02# |     |                    |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H9R1BA03# |  |        |               |         | 24pF  | ±5%     | GRM0222C1H240JA02# |     |                    |  |
|        |               |         |       | ±0.25pF | GRM0222C1H9R1CA03# |  |        |               |         | 27pF  | ±5%     | GRM0222C1H270JA02# |     |                    |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H9R1DA03# |  |        |               |         | 30pF  | ±5%     | GRM0222C1H300JA02# |     |                    |  |
|        |               |         | 9.2pF | ±0.05pF | GRM0222C1H9R2WA03# |  |        |               |         | 33pF  | ±5%     | GRM0222C1H330JA02# |     |                    |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H9R2BA03# |  |        |               |         | 36pF  | ±5%     | GRM0222C1H360JA02# |     |                    |  |
|        |               |         |       | ±0.25pF | GRM0222C1H9R2CA03# |  |        |               |         | 39pF  | ±5%     | GRM0222C1H390JA02# |     |                    |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H9R2DA03# |  |        |               |         | 43pF  | ±5%     | GRM0222C1H430JA02# |     |                    |  |
|        |               |         | 9.3pF | ±0.05pF | GRM0222C1H9R3WA03# |  |        |               |         | 47pF  | ±5%     | GRM0222C1H470JA02# |     |                    |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H9R3BA03# |  |        |               |         | 51pF  | ±5%     | GRM0222C1H510JA02# |     |                    |  |
|        |               |         |       | ±0.25pF | GRM0222C1H9R3CA03# |  |        |               |         | 56pF  | ±5%     | GRM0222C1H560JA02# |     |                    |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H9R3DA03# |  |        |               |         | 62pF  | ±5%     | GRM0222C1H620JA02# |     |                    |  |
|        |               |         | 9.4pF | ±0.05pF | GRM0222C1H9R4WA03# |  |        |               |         | 68pF  | ±5%     | GRM0222C1H680JA02# |     |                    |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H9R4BA03# |  |        |               |         | 75pF  | ±5%     | GRM0222C1H750JA02# |     |                    |  |
|        |               |         |       | ±0.25pF | GRM0222C1H9R4CA03# |  |        |               |         | 82pF  | ±5%     | GRM0222C1H820JA02# |     |                    |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H9R4DA03# |  |        |               |         | 91pF  | ±5%     | GRM0222C1H910JA02# |     |                    |  |
|        |               |         | 9.5pF | ±0.05pF | GRM0222C1H9R5WA03# |  |        |               |         | 100pF | ±5%     | GRM0222C1H101JA02# |     |                    |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H9R5BA03# |  |        |               |         | 25Vdc | COG     | 120pF              | ±5% | GRM0225C1E121JA02# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H9R5CA03# |  |        |               |         |       |         | 150pF              | ±5% | GRM0225C1E151JA02# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H9R5DA03# |  |        |               |         |       |         | 180pF              | ±5% | GRM0225C1E181JA02# |  |
|        |               |         | 9.6pF | ±0.05pF | GRM0222C1H9R6WA03# |  |        |               |         |       |         | 220pF              | ±5% | GRM0225C1E221JA02# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H9R6BA03# |  |        |               |         |       | CH      | 120pF              | ±5% | GRM0222C1E121JA02# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H9R6CA03# |  |        |               |         |       |         | 150pF              | ±5% | GRM0222C1E151JA02# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H9R6DA03# |  |        |               |         |       |         | 180pF              | ±5% | GRM0222C1E181JA02# |  |
|        |               |         | 9.7pF | ±0.05pF | GRM0222C1H9R7WA03# |  |        |               |         |       |         | 220pF              | ±5% | GRM0222C1E221JA02# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H9R7BA03# |  |        |               |         | 16Vdc | COG     | 120pF              | ±5% | GRM0225C1C121JA02# |  |
|        |               |         |       | ±0.25pF | GRM0222C1H9R7CA03# |  |        |               |         |       |         | 150pF              | ±5% | GRM0225C1C151JA02# |  |
|        |               |         |       | ±0.5pF  | GRM0222C1H9R7DA03# |  |        |               |         |       |         | 180pF              | ±5% | GRM0225C1C181JA02# |  |
|        |               |         | 9.8pF | ±0.05pF | GRM0222C1H9R8WA03# |  |        |               |         |       |         | 220pF              | ±5% | GRM0225C1C221JA02# |  |
|        |               |         |       | ±0.1pF  | GRM0222C1H9R8BA03# |  |        |               |         |       | CH      | 120pF              | ±5% | GRM0222C1C121JA02# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.4×0.2mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol. | Part Number        |
|--------|---------------|---------|-------|------|--------------------|
| 0.22mm | 16Vdc         | CH      | 150pF | ±5%  | GRM0222C1C151JA02# |
|        |               |         | 180pF | ±5%  | GRM0222C1C181JA02# |
|        |               |         | 220pF | ±5%  | GRM0222C1C221JA02# |

0.6×0.3mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |
|--------|---------------|---------|--------|---------|--------------------|
| 0.33mm | 100Vdc        | COG     | 0.10pF | ±0.05pF | GRM0335C2AR10WA01# |
|        |               |         |        | ±0.1pF  | GRM0335C2AR10BA01# |
|        |               |         | 0.20pF | ±0.05pF | GRM0335C2AR20WA01# |
|        |               |         |        | ±0.1pF  | GRM0335C2AR20BA01# |
|        |               |         | 0.30pF | ±0.05pF | GRM0335C2AR30WA01# |
|        |               |         |        | ±0.1pF  | GRM0335C2AR30BA01# |
|        |               |         | 0.40pF | ±0.05pF | GRM0335C2AR40WA01# |
|        |               |         |        | ±0.1pF  | GRM0335C2AR40BA01# |
|        |               |         | 0.50pF | ±0.05pF | GRM0335C2AR50WA01# |
|        |               |         |        | ±0.1pF  | GRM0335C2AR50BA01# |
|        |               |         | 0.60pF | ±0.05pF | GRM0335C2AR60WA01# |
|        |               |         |        | ±0.1pF  | GRM0335C2AR60BA01# |
|        |               |         | 0.70pF | ±0.05pF | GRM0335C2AR70WA01# |
|        |               |         |        | ±0.1pF  | GRM0335C2AR70BA01# |
|        |               |         | 0.80pF | ±0.05pF | GRM0335C2AR80WA01# |
|        |               |         |        | ±0.1pF  | GRM0335C2AR80BA01# |
|        |               |         | 0.90pF | ±0.05pF | GRM0335C2AR90WA01# |
|        |               |         |        | ±0.1pF  | GRM0335C2AR90BA01# |
|        |               |         | 1.0pF  | ±0.05pF | GRM0335C2A1R0WA01# |
|        |               |         |        | ±0.1pF  | GRM0335C2A1R0BA01# |
|        |               |         |        | ±0.25pF | GRM0335C2A1R0CA01# |
|        |               |         | 1.1pF  | ±0.05pF | GRM0335C2A1R1WA01# |
|        |               |         |        | ±0.1pF  | GRM0335C2A1R1BA01# |
|        |               |         |        | ±0.25pF | GRM0335C2A1R1CA01# |
|        |               |         | 1.2pF  | ±0.05pF | GRM0335C2A1R2WA01# |
|        |               |         |        | ±0.1pF  | GRM0335C2A1R2BA01# |
|        |               |         |        | ±0.25pF | GRM0335C2A1R2CA01# |
|        |               |         | 1.3pF  | ±0.05pF | GRM0335C2A1R3WA01# |
|        |               |         |        | ±0.1pF  | GRM0335C2A1R3BA01# |
|        |               |         |        | ±0.25pF | GRM0335C2A1R3CA01# |
|        |               |         | 1.4pF  | ±0.05pF | GRM0335C2A1R4WA01# |
|        |               |         |        | ±0.1pF  | GRM0335C2A1R4BA01# |
|        |               |         |        | ±0.25pF | GRM0335C2A1R4CA01# |
|        |               |         | 1.5pF  | ±0.05pF | GRM0335C2A1R5WA01# |
|        |               |         |        | ±0.1pF  | GRM0335C2A1R5BA01# |
|        |               |         |        | ±0.25pF | GRM0335C2A1R5CA01# |
|        |               |         | 1.6pF  | ±0.05pF | GRM0335C2A1R6WA01# |
|        |               |         |        | ±0.1pF  | GRM0335C2A1R6BA01# |
|        |               |         |        | ±0.25pF | GRM0335C2A1R6CA01# |
|        |               |         | 1.7pF  | ±0.05pF | GRM0335C2A1R7WA01# |
|        |               |         |        | ±0.1pF  | GRM0335C2A1R7BA01# |
|        |               |         |        | ±0.25pF | GRM0335C2A1R7CA01# |
|        |               |         | 1.8pF  | ±0.05pF | GRM0335C2A1R8WA01# |
|        |               |         |        | ±0.1pF  | GRM0335C2A1R8BA01# |
|        |               |         |        | ±0.25pF | GRM0335C2A1R8CA01# |
|        |               |         | 1.9pF  | ±0.05pF | GRM0335C2A1R9WA01# |
|        |               |         |        | ±0.1pF  | GRM0335C2A1R9BA01# |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |
|--------|---------------|---------|-------|---------|--------------------|
| 0.33mm | 100Vdc        | COG     | 1.9pF | ±0.25pF | GRM0335C2A1R9CA01# |
|        |               |         |       | ±0.05pF | GRM0335C2A2R0WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A2R0BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A2R0CA01# |
|        |               |         | 2.1pF | ±0.05pF | GRM0335C2A2R1WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A2R1BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A2R1CA01# |
|        |               |         | 2.2pF | ±0.05pF | GRM0335C2A2R2WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A2R2BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A2R2CA01# |
|        |               |         | 2.3pF | ±0.05pF | GRM0335C2A2R3WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A2R3BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A2R3CA01# |
|        |               |         | 2.4pF | ±0.05pF | GRM0335C2A2R4WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A2R4BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A2R4CA01# |
|        |               |         | 2.5pF | ±0.05pF | GRM0335C2A2R5WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A2R5BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A2R5CA01# |
|        |               |         | 2.6pF | ±0.05pF | GRM0335C2A2R6WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A2R6BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A2R6CA01# |
|        |               |         | 2.7pF | ±0.05pF | GRM0335C2A2R7WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A2R7BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A2R7CA01# |
|        |               |         | 2.8pF | ±0.05pF | GRM0335C2A2R8WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A2R8BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A2R8CA01# |
|        |               |         | 2.9pF | ±0.05pF | GRM0335C2A2R9WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A2R9BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A2R9CA01# |
|        |               |         | 3.0pF | ±0.05pF | GRM0335C2A3R0WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A3R0BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A3R0CA01# |
|        |               |         | 3.1pF | ±0.05pF | GRM0335C2A3R1WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A3R1BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A3R1CA01# |
|        |               |         | 3.2pF | ±0.05pF | GRM0335C2A3R2WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A3R2BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A3R2CA01# |
|        |               |         | 3.3pF | ±0.05pF | GRM0335C2A3R3WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A3R3BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A3R3CA01# |
|        |               |         | 3.4pF | ±0.05pF | GRM0335C2A3R4WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A3R4BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A3R4CA01# |
|        |               |         | 3.5pF | ±0.05pF | GRM0335C2A3R5WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A3R5BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A3R5CA01# |
|        |               |         | 3.6pF | ±0.05pF | GRM0335C2A3R6WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A3R6BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A3R6CA01# |
|        |               |         | 3.7pF | ±0.05pF | GRM0335C2A3R7WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A3R7BA01# |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.6×0.3mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |
|--------|---------------|---------|-------|---------|--------------------|
| 0.33mm | 100Vdc        | COG     | 3.7pF | ±0.25pF | GRM0335C2A3R7CA01# |
|        |               |         |       | ±0.05pF | GRM0335C2A3R8WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A3R8BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A3R8CA01# |
|        |               |         | 3.9pF | ±0.05pF | GRM0335C2A3R9WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A3R9BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A3R9CA01# |
|        |               |         | 4.0pF | ±0.05pF | GRM0335C2A4R0WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A4R0BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A4R0CA01# |
|        |               |         | 4.1pF | ±0.05pF | GRM0335C2A4R1WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A4R1BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A4R1CA01# |
|        |               |         | 4.2pF | ±0.05pF | GRM0335C2A4R2WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A4R2BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A4R2CA01# |
|        |               |         | 4.3pF | ±0.05pF | GRM0335C2A4R3WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A4R3BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A4R3CA01# |
|        |               |         | 4.4pF | ±0.05pF | GRM0335C2A4R4WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A4R4BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A4R4CA01# |
|        |               |         | 4.5pF | ±0.05pF | GRM0335C2A4R5WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A4R5BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A4R5CA01# |
|        |               |         | 4.6pF | ±0.05pF | GRM0335C2A4R6WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A4R6BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A4R6CA01# |
|        |               |         | 4.7pF | ±0.05pF | GRM0335C2A4R7WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A4R7BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A4R7CA01# |
|        |               |         | 4.8pF | ±0.05pF | GRM0335C2A4R8WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A4R8BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A4R8CA01# |
|        |               |         | 4.9pF | ±0.05pF | GRM0335C2A4R9WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A4R9BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A4R9CA01# |
|        |               |         | 5.0pF | ±0.05pF | GRM0335C2A5R0WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A5R0BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A5R0CA01# |
|        |               |         | 5.1pF | ±0.05pF | GRM0335C2A5R1WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A5R1BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A5R1CA01# |
|        |               |         | 5.2pF | ±0.05pF | GRM0335C2A5R2WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A5R2BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A5R2CA01# |
|        |               |         | 5.3pF | ±0.05pF | GRM0335C2A5R3WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A5R3BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A5R3CA01# |
|        |               |         | 5.4pF | ±0.05pF | GRM0335C2A5R3DA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A5R4BA01# |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |
|--------|---------------|---------|-------|---------|--------------------|
| 0.33mm | 100Vdc        | COG     | 5.4pF | ±0.25pF | GRM0335C2A5R4CA01# |
|        |               |         |       | ±0.5pF  | GRM0335C2A5R4DA01# |
|        |               |         | 5.5pF | ±0.05pF | GRM0335C2A5R5WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A5R5BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A5R5CA01# |
|        |               |         | 5.6pF | ±0.05pF | GRM0335C2A5R6WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A5R6BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A5R6CA01# |
|        |               |         | 5.7pF | ±0.05pF | GRM0335C2A5R7WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A5R7BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A5R7CA01# |
|        |               |         | 5.8pF | ±0.05pF | GRM0335C2A5R8WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A5R8BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A5R8CA01# |
|        |               |         | 5.9pF | ±0.05pF | GRM0335C2A5R9WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A5R9BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A5R9CA01# |
|        |               |         | 6.0pF | ±0.05pF | GRM0335C2A6R0WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A6R0BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A6R0CA01# |
|        |               |         | 6.1pF | ±0.05pF | GRM0335C2A6R1WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A6R1BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A6R1CA01# |
|        |               |         | 6.2pF | ±0.05pF | GRM0335C2A6R2WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A6R2BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A6R2CA01# |
|        |               |         | 6.3pF | ±0.05pF | GRM0335C2A6R3WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A6R3BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A6R3CA01# |
|        |               |         | 6.4pF | ±0.05pF | GRM0335C2A6R4WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A6R4BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A6R4CA01# |
|        |               |         | 6.5pF | ±0.05pF | GRM0335C2A6R5WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A6R5BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A6R5CA01# |
|        |               |         | 6.6pF | ±0.05pF | GRM0335C2A6R6WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A6R6BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A6R6CA01# |
|        |               |         | 6.7pF | ±0.05pF | GRM0335C2A6R7WA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A6R7BA01# |
|        |               |         |       | ±0.25pF | GRM0335C2A6R7CA01# |
|        |               |         | 6.8pF | ±0.05pF | GRM0335C2A6R7DA01# |
|        |               |         |       | ±0.1pF  | GRM0335C2A6R8BA01# |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.6×0.3mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.33mm | 100Vdc        | COG     | 6.8pF | ±0.05pF | GRM0335C2A6R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A6R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A6R8CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C2A6R8DA01# |  |
|        |               |         | 6.9pF | ±0.05pF | GRM0335C2A6R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A6R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A6R9CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C2A6R9DA01# |  |
|        |               |         | 7.0pF | ±0.05pF | GRM0335C2A7R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A7R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A7R0CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C2A7R0DA01# |  |
|        |               |         | 7.1pF | ±0.05pF | GRM0335C2A7R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A7R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A7R1CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C2A7R1DA01# |  |
|        |               |         | 7.2pF | ±0.05pF | GRM0335C2A7R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A7R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A7R2CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C2A7R2DA01# |  |
|        |               |         | 7.3pF | ±0.05pF | GRM0335C2A7R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A7R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A7R3CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C2A7R3DA01# |  |
|        |               |         | 7.4pF | ±0.05pF | GRM0335C2A7R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A7R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A7R4CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C2A7R4DA01# |  |
|        |               |         | 7.5pF | ±0.05pF | GRM0335C2A7R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A7R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A7R5CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C2A7R5DA01# |  |
|        |               |         | 7.6pF | ±0.05pF | GRM0335C2A7R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A7R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A7R6CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C2A7R6DA01# |  |
|        |               |         | 7.7pF | ±0.05pF | GRM0335C2A7R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A7R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A7R7CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C2A7R7DA01# |  |
|        |               |         | 7.8pF | ±0.05pF | GRM0335C2A7R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A7R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A7R8CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C2A7R8DA01# |  |
|        |               |         | 7.9pF | ±0.05pF | GRM0335C2A7R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A7R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A7R9CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C2A7R9DA01# |  |
|        |               |         | 8.0pF | ±0.05pF | GRM0335C2A8R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A8R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A8R0CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C2A8R0DA01# |  |
|        |               |         | 8.1pF | ±0.05pF | GRM0335C2A8R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A8R1BA01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.33mm | 100Vdc        | COG     | 8.1pF | ±0.25pF | GRM0335C2A8R1CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C2A8R1DA01# |  |
|        |               |         | 8.2pF | ±0.05pF | GRM0335C2A8R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A8R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A8R2CA01# |  |
|        |               |         | 8.3pF | ±0.5pF  | GRM0335C2A8R2DA01# |  |
|        |               |         |       | ±0.05pF | GRM0335C2A8R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A8R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A8R3CA01# |  |
|        |               |         | 8.4pF | ±0.5pF  | GRM0335C2A8R3DA01# |  |
|        |               |         |       | ±0.05pF | GRM0335C2A8R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A8R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A8R4CA01# |  |
|        |               |         | 8.5pF | ±0.5pF  | GRM0335C2A8R4DA01# |  |
|        |               |         |       | ±0.05pF | GRM0335C2A8R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A8R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A8R5CA01# |  |
|        |               |         | 8.6pF | ±0.5pF  | GRM0335C2A8R5DA01# |  |
|        |               |         |       | ±0.05pF | GRM0335C2A8R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A8R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A8R6CA01# |  |
|        |               |         | 8.7pF | ±0.5pF  | GRM0335C2A8R6DA01# |  |
|        |               |         |       | ±0.05pF | GRM0335C2A8R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A8R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A8R7CA01# |  |
|        |               |         | 8.8pF | ±0.5pF  | GRM0335C2A8R7DA01# |  |
|        |               |         |       | ±0.05pF | GRM0335C2A8R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A8R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A8R8CA01# |  |
|        |               |         | 8.9pF | ±0.5pF  | GRM0335C2A8R8DA01# |  |
|        |               |         |       | ±0.05pF | GRM0335C2A8R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A8R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A8R9CA01# |  |
|        |               |         | 9.0pF | ±0.5pF  | GRM0335C2A8R9DA01# |  |
|        |               |         |       | ±0.05pF | GRM0335C2A9R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A9R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A9R0CA01# |  |
|        |               |         | 9.1pF | ±0.5pF  | GRM0335C2A9R0DA01# |  |
|        |               |         |       | ±0.05pF | GRM0335C2A9R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A9R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A9R1CA01# |  |
|        |               |         | 9.2pF | ±0.5pF  | GRM0335C2A9R1DA01# |  |
|        |               |         |       | ±0.05pF | GRM0335C2A9R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A9R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A9R2CA01# |  |
|        |               |         | 9.3pF | ±0.5pF  | GRM0335C2A9R2DA01# |  |
|        |               |         |       | ±0.05pF | GRM0335C2A9R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A9R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A9R3CA01# |  |
|        |               |         | 9.4pF | ±0.5pF  | GRM0335C2A9R3DA01# |  |
|        |               |         |       | ±0.05pF | GRM0335C2A9R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C2A9R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C2A9R4CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C2A9R4DA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.6×0.3mm)

| T max. | Rated Voltage | TC Code | Cap.   | Tol.               | Part Number        |                    | T max. | Rated Voltage | TC Code | Cap.  | Tol.               | Part Number        |                    |                    |  |
|--------|---------------|---------|--------|--------------------|--------------------|--------------------|--------|---------------|---------|-------|--------------------|--------------------|--------------------|--------------------|--|
| 0.33mm | 100Vdc        | COG     | 9.5pF  | ±0.05pF            | GRM0335C2A9R5WA01# |                    | 0.33mm | 100Vdc        | CK      | 1.3pF | ±0.25pF            | GRM0334C2A1R3CA01# |                    |                    |  |
|        |               |         |        | ±0.1pF             | GRM0335C2A9R5BA01# |                    |        |               |         |       | 1.4pF              | ±0.05pF            | GRM0334C2A1R4WA01# |                    |  |
|        |               |         |        | ±0.25pF            | GRM0335C2A9R5CA01# |                    |        |               |         |       |                    | ±0.1pF             | GRM0334C2A1R4BA01# |                    |  |
|        |               |         |        | ±0.5pF             | GRM0335C2A9R5DA01# |                    |        |               |         |       |                    | ±0.25pF            | GRM0334C2A1R4CA01# |                    |  |
|        |               |         | 9.6pF  | ±0.05pF            | GRM0335C2A9R6WA01# |                    |        |               |         | 1.5pF | ±0.05pF            | GRM0334C2A1R5WA01# |                    |                    |  |
|        |               |         |        | ±0.1pF             | GRM0335C2A9R6BA01# |                    |        |               |         |       | ±0.1pF             | GRM0334C2A1R5BA01# |                    |                    |  |
|        |               |         |        | ±0.25pF            | GRM0335C2A9R6CA01# |                    |        |               |         |       | ±0.25pF            | GRM0334C2A1R5CA01# |                    |                    |  |
|        |               |         |        | ±0.5pF             | GRM0335C2A9R6DA01# |                    |        |               |         | 1.6pF | ±0.05pF            | GRM0334C2A1R6WA01# |                    |                    |  |
|        |               |         | 9.7pF  | ±0.05pF            | GRM0335C2A9R7WA01# |                    |        |               |         |       | ±0.1pF             | GRM0334C2A1R6BA01# |                    |                    |  |
|        |               |         |        | ±0.1pF             | GRM0335C2A9R7BA01# |                    |        |               |         |       | ±0.25pF            | GRM0334C2A1R6CA01# |                    |                    |  |
|        |               |         |        | ±0.25pF            | GRM0335C2A9R7CA01# |                    |        |               |         | 1.7pF | ±0.05pF            | GRM0334C2A1R7WA01# |                    |                    |  |
|        |               |         | ±0.5pF | GRM0335C2A9R7DA01# |                    | ±0.1pF             |        |               |         |       | GRM0334C2A1R7BA01# |                    |                    |                    |  |
|        |               |         | 9.8pF  | ±0.05pF            | GRM0335C2A9R8WA01# |                    |        |               |         |       | ±0.25pF            | GRM0334C2A1R7CA01# |                    |                    |  |
|        |               |         |        | ±0.1pF             | GRM0335C2A9R8BA01# |                    |        |               |         | 1.8pF | ±0.05pF            | GRM0334C2A1R8WA01# |                    |                    |  |
|        |               |         |        | ±0.25pF            | GRM0335C2A9R8CA01# |                    |        |               |         |       | ±0.1pF             | GRM0334C2A1R8BA01# |                    |                    |  |
|        |               |         |        | ±0.5pF             | GRM0335C2A9R8DA01# |                    |        |               |         |       | ±0.25pF            | GRM0334C2A1R8CA01# |                    |                    |  |
|        |               |         | 9.9pF  | ±0.05pF            | GRM0335C2A9R9WA01# |                    |        |               |         | 1.9pF | ±0.05pF            | GRM0334C2A1R9WA01# |                    |                    |  |
|        |               |         |        | ±0.1pF             | GRM0335C2A9R9BA01# |                    |        |               |         |       | ±0.1pF             | GRM0334C2A1R9BA01# |                    |                    |  |
|        |               |         |        | ±0.25pF            | GRM0335C2A9R9CA01# |                    |        |               |         |       | ±0.25pF            | GRM0334C2A1R9CA01# |                    |                    |  |
|        |               |         |        | ±0.5pF             | GRM0335C2A9R9DA01# |                    |        |               |         | 2.0pF | ±0.05pF            | GRM0334C2A2R0WA01# |                    |                    |  |
|        |               |         | 10pF   | ±2%                | GRM0335C2A100GA01# |                    |        |               |         |       | ±0.1pF             | GRM0334C2A2R0BA01# |                    |                    |  |
|        |               |         |        | ±5%                | GRM0335C2A100JA01# |                    |        |               |         |       | ±0.25pF            | GRM0334C2A2R0CA01# |                    |                    |  |
|        |               |         | 12pF   | ±2%                | GRM0335C2A120GA01# |                    |        |               |         | CJ    | 2.1pF              | ±0.05pF            | GRM0333C2A2R1WA01# |                    |  |
|        |               |         |        | ±5%                | GRM0335C2A120JA01# |                    |        |               |         |       |                    | ±0.1pF             | GRM0333C2A2R1BA01# |                    |  |
|        |               |         | 15pF   | ±2%                | GRM0335C2A150GA01# |                    |        |               |         |       |                    | ±0.25pF            | GRM0333C2A2R1CA01# |                    |  |
|        |               |         |        | ±5%                | GRM0335C2A150JA01# |                    |        |               |         |       | 2.2pF              | ±0.05pF            | GRM0333C2A2R2WA01# |                    |  |
|        |               |         | CK     | 0.10pF             | ±0.05pF            | GRM0334C2AR10WA01# |        |               |         |       |                    |                    | ±0.1pF             | GRM0333C2A2R2BA01# |  |
|        |               |         |        |                    | ±0.1pF             | GRM0334C2AR20BA01# |        |               |         |       |                    |                    | ±0.25pF            | GRM0333C2A2R2CA01# |  |
|        |               |         |        | 0.20pF             | ±0.05pF            | GRM0334C2AR20WA01# |        |               |         |       |                    | 2.3pF              | ±0.05pF            | GRM0333C2A2R3WA01# |  |
|        |               |         |        |                    | ±0.1pF             | GRM0334C2AR30BA01# |        |               |         |       |                    |                    | ±0.1pF             | GRM0333C2A2R3BA01# |  |
|        |               |         |        | 0.30pF             | ±0.05pF            | GRM0334C2AR30WA01# |        |               |         |       |                    |                    | ±0.25pF            | GRM0333C2A2R3CA01# |  |
|        |               |         |        |                    | ±0.1pF             | GRM0334C2AR30BA01# |        |               |         |       |                    | 2.4pF              | ±0.05pF            | GRM0333C2A2R4WA01# |  |
|        |               |         |        | 0.40pF             | ±0.05pF            | GRM0334C2AR40WA01# |        |               |         |       |                    |                    | ±0.1pF             | GRM0333C2A2R4BA01# |  |
|        |               |         |        |                    | ±0.1pF             | GRM0334C2AR40BA01# |        |               |         |       |                    |                    | ±0.25pF            | GRM0333C2A2R4CA01# |  |
|        |               |         |        | 0.50pF             | ±0.05pF            | GRM0334C2AR50WA01# |        |               |         |       |                    | 2.5pF              | ±0.05pF            | GRM0333C2A2R5WA01# |  |
|        |               |         |        |                    | ±0.1pF             | GRM0334C2AR50BA01# |        |               |         |       |                    |                    | ±0.1pF             | GRM0333C2A2R5BA01# |  |
|        |               |         |        | 0.60pF             | ±0.05pF            | GRM0334C2AR60WA01# |        |               |         |       |                    |                    | ±0.25pF            | GRM0333C2A2R5CA01# |  |
|        |               |         |        |                    | ±0.1pF             | GRM0334C2AR60BA01# |        |               |         |       |                    | 2.6pF              | ±0.05pF            | GRM0333C2A2R6WA01# |  |
|        |               |         |        | 0.70pF             | ±0.05pF            | GRM0334C2AR70WA01# |        |               |         |       |                    |                    | ±0.1pF             | GRM0333C2A2R6BA01# |  |
|        |               |         |        |                    | ±0.1pF             | GRM0334C2AR70BA01# |        |               |         |       |                    |                    | ±0.25pF            | GRM0333C2A2R6CA01# |  |
|        |               |         |        | 0.80pF             | ±0.05pF            | GRM0334C2AR80WA01# |        |               |         |       |                    | 2.7pF              | ±0.05pF            | GRM0333C2A2R7WA01# |  |
|        |               |         |        |                    | ±0.1pF             | GRM0334C2AR80BA01# |        |               |         |       |                    |                    | ±0.1pF             | GRM0333C2A2R7BA01# |  |
|        |               |         |        | 0.90pF             | ±0.05pF            | GRM0334C2AR90WA01# |        |               |         |       |                    |                    | ±0.25pF            | GRM0333C2A2R7CA01# |  |
|        |               |         |        |                    | ±0.1pF             | GRM0334C2AR90BA01# |        |               |         |       |                    | 2.8pF              | ±0.05pF            | GRM0333C2A2R8WA01# |  |
|        |               | 1.0pF   |        | ±0.05pF            | GRM0334C2A1R0WA01# |                    |        |               | ±0.1pF  |       | GRM0333C2A2R8BA01# |                    |                    |                    |  |
|        |               |         |        | ±0.1pF             | GRM0334C2A1R0BA01# |                    |        |               | ±0.25pF |       | GRM0333C2A2R8CA01# |                    |                    |                    |  |
|        |               |         |        | ±0.25pF            | GRM0334C2A1R0CA01# |                    |        |               | 2.9pF   |       | ±0.05pF            | GRM0333C2A2R9WA01# |                    |                    |  |
|        |               | 1.1pF   |        | ±0.05pF            | GRM0334C2A1R1WA01# |                    |        |               |         |       | ±0.1pF             | GRM0333C2A2R9BA01# |                    |                    |  |
|        |               |         |        | ±0.1pF             | GRM0334C2A1R1BA01# |                    |        |               |         |       | ±0.25pF            | GRM0333C2A2R9CA01# |                    |                    |  |
|        |               |         |        | ±0.25pF            | GRM0334C2A1R1CA01# |                    |        |               | 3.0pF   |       | ±0.05pF            | GRM0333C2A3R0WA01# |                    |                    |  |
|        |               | 1.2pF   |        | ±0.05pF            | GRM0334C2A1R2WA01# |                    |        |               |         |       | ±0.1pF             | GRM0333C2A3R0BA01# |                    |                    |  |
|        |               |         |        | ±0.1pF             | GRM0334C2A1R2BA01# |                    |        |               |         |       | ±0.25pF            | GRM0333C2A3R0CA01# |                    |                    |  |
|        |               |         |        | ±0.25pF            | GRM0334C2A1R2CA01# |                    |        |               | 3.1pF   |       | ±0.05pF            | GRM0333C2A3R1WA01# |                    |                    |  |
|        |               | 1.3pF   |        | ±0.05pF            | GRM0334C2A1R3WA01# |                    |        |               |         |       | ±0.1pF             | GRM0333C2A3R1BA01# |                    |                    |  |
|        |               |         |        | ±0.1pF             | GRM0334C2A1R3BA01# |                    |        |               |         |       |                    |                    |                    |                    |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.6×0.3mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |                    | T max. | Rated Voltage | TC Code | Cap.    | Tol.               | Part Number        |                    |                    |  |
|--------|---------------|---------|-------|---------|--------------------|--------------------|--------|---------------|---------|---------|--------------------|--------------------|--------------------|--------------------|--|
| 0.33mm | 100Vdc        | CJ      | 3.1pF | ±0.25pF | GRM0333C2A3R1CA01# |                    | 0.33mm | 100Vdc        | CH      | 4.9pF   | ±0.25pF            | GRM0332C2A4R9CA01# |                    |                    |  |
|        |               |         |       | ±0.05pF | GRM0333C2A3R2WA01# |                    |        |               |         |         | 5.0pF              | ±0.05pF            | GRM0332C2A5R0WA01# |                    |  |
|        |               |         |       |         | ±0.1pF             | GRM0333C2A3R2BA01# |        |               |         |         |                    |                    | ±0.1pF             | GRM0332C2A5R0BA01# |  |
|        |               |         |       |         | ±0.25pF            | GRM0333C2A3R2CA01# |        |               |         |         |                    |                    | ±0.25pF            | GRM0332C2A5R0CA01# |  |
|        |               |         | 3.3pF | ±0.05pF | GRM0333C2A3R3WA01# |                    |        |               |         | 5.1pF   | ±0.05pF            | GRM0332C2A5R1WA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM0333C2A3R3BA01# |                    |        |               |         |         | ±0.1pF             | GRM0332C2A5R1BA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM0333C2A3R3CA01# |                    |        |               |         |         | ±0.25pF            | GRM0332C2A5R1CA01# |                    |                    |  |
|        |               |         | 3.4pF | ±0.05pF | GRM0333C2A3R4WA01# |                    |        |               |         |         | ±0.5pF             | GRM0332C2A5R1DA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM0333C2A3R4BA01# |                    |        |               |         | 5.2pF   | ±0.05pF            | GRM0332C2A5R2WA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM0333C2A3R4CA01# |                    |        |               |         |         | ±0.1pF             | GRM0332C2A5R2BA01# |                    |                    |  |
|        |               |         | 3.5pF | ±0.05pF | GRM0333C2A3R5WA01# |                    |        |               |         |         | ±0.25pF            | GRM0332C2A5R2CA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM0333C2A3R5BA01# |                    |        |               |         |         | ±0.5pF             | GRM0332C2A5R2DA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM0333C2A3R5CA01# |                    |        |               |         | 5.3pF   | ±0.05pF            | GRM0332C2A5R3WA01# |                    |                    |  |
|        |               |         | 3.6pF | ±0.05pF | GRM0333C2A3R6WA01# |                    |        |               |         |         | ±0.1pF             | GRM0332C2A5R3BA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM0333C2A3R6BA01# |                    |        |               |         |         | ±0.25pF            | GRM0332C2A5R3CA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM0333C2A3R6CA01# |                    |        |               |         |         | ±0.5pF             | GRM0332C2A5R3DA01# |                    |                    |  |
|        |               |         | 3.7pF | ±0.05pF | GRM0333C2A3R7WA01# |                    |        |               |         | 5.4pF   | ±0.05pF            | GRM0332C2A5R4WA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM0333C2A3R7BA01# |                    |        |               |         |         | ±0.1pF             | GRM0332C2A5R4BA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM0333C2A3R7CA01# |                    |        |               |         |         | ±0.25pF            | GRM0332C2A5R4CA01# |                    |                    |  |
|        |               |         | 3.8pF | ±0.05pF | GRM0333C2A3R8WA01# |                    |        |               |         |         | ±0.5pF             | GRM0332C2A5R4DA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM0333C2A3R8BA01# |                    |        |               |         | 5.5pF   | ±0.05pF            | GRM0332C2A5R5WA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM0333C2A3R8CA01# |                    |        |               |         |         | ±0.1pF             | GRM0332C2A5R5BA01# |                    |                    |  |
|        |               |         | 3.9pF | ±0.05pF | GRM0333C2A3R9WA01# |                    |        |               |         |         | ±0.25pF            | GRM0332C2A5R5CA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM0333C2A3R9BA01# |                    |        |               |         |         | ±0.5pF             | GRM0332C2A5R5DA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM0333C2A3R9CA01# |                    |        |               |         | 5.6pF   | ±0.05pF            | GRM0332C2A5R6WA01# |                    |                    |  |
|        |               |         | 4.0pF | ±0.05pF | GRM0332C2A4R0WA01# |                    |        |               |         |         | ±0.1pF             | GRM0332C2A5R6BA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A4R0BA01# |                    |        |               |         |         | ±0.25pF            | GRM0332C2A5R6CA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM0332C2A4R0CA01# |                    |        |               |         |         | ±0.5pF             | GRM0332C2A5R6DA01# |                    |                    |  |
|        |               |         | CH    | 4.1pF   | ±0.05pF            | GRM0332C2A4R1WA01# |        |               |         |         | 5.7pF              | ±0.05pF            | GRM0332C2A5R7WA01# |                    |  |
|        |               |         |       |         | ±0.1pF             | GRM0332C2A4R1BA01# |        |               |         |         |                    | ±0.1pF             | GRM0332C2A5R7BA01# |                    |  |
|        |               |         |       |         | ±0.25pF            | GRM0332C2A4R1CA01# |        |               |         |         |                    | ±0.25pF            | GRM0332C2A5R7CA01# |                    |  |
|        |               |         |       | 4.2pF   | ±0.05pF            | GRM0332C2A4R2WA01# |        |               |         |         |                    | ±0.5pF             | GRM0332C2A5R7DA01# |                    |  |
|        |               |         |       |         | ±0.1pF             | GRM0332C2A4R2BA01# |        |               |         |         | 5.8pF              | ±0.05pF            | GRM0332C2A5R8WA01# |                    |  |
|        |               |         |       |         | ±0.25pF            | GRM0332C2A4R2CA01# |        |               |         |         |                    | ±0.1pF             | GRM0332C2A5R8BA01# |                    |  |
|        |               |         |       | 4.3pF   | ±0.05pF            | GRM0332C2A4R3WA01# |        |               |         |         |                    | ±0.25pF            | GRM0332C2A5R8CA01# |                    |  |
|        |               |         |       |         | ±0.1pF             | GRM0332C2A4R3BA01# |        |               |         |         |                    | ±0.5pF             | GRM0332C2A5R8DA01# |                    |  |
|        |               | ±0.25pF |       |         | GRM0332C2A4R3CA01# |                    |        |               | 5.9pF   | ±0.05pF | GRM0332C2A5R9WA01# |                    |                    |                    |  |
|        |               | 4.4pF   |       | ±0.05pF | GRM0332C2A4R4WA01# |                    |        |               |         | ±0.1pF  | GRM0332C2A5R9BA01# |                    |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A4R4BA01# |                    |        |               |         | ±0.25pF | GRM0332C2A5R9CA01# |                    |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM0332C2A4R4CA01# |                    |        |               |         | ±0.5pF  | GRM0332C2A5R9DA01# |                    |                    |                    |  |
|        |               | 4.5pF   |       | ±0.05pF | GRM0332C2A4R5WA01# |                    |        |               | 6.0pF   | ±0.05pF | GRM0332C2A6R0WA01# |                    |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A4R5BA01# |                    |        |               |         | ±0.1pF  | GRM0332C2A6R0BA01# |                    |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM0332C2A4R5CA01# |                    |        |               |         | ±0.25pF | GRM0332C2A6R0CA01# |                    |                    |                    |  |
|        |               | 4.6pF   |       | ±0.05pF | GRM0332C2A4R6WA01# |                    |        |               |         | ±0.5pF  | GRM0332C2A6R0DA01# |                    |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A4R6BA01# |                    |        |               | 6.1pF   | ±0.05pF | GRM0332C2A6R1WA01# |                    |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM0332C2A4R6CA01# |                    |        |               |         | ±0.1pF  | GRM0332C2A6R1BA01# |                    |                    |                    |  |
|        |               | 4.7pF   |       | ±0.05pF | GRM0332C2A4R7WA01# |                    |        |               |         | ±0.25pF | GRM0332C2A6R1CA01# |                    |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A4R7BA01# |                    |        |               |         | ±0.5pF  | GRM0332C2A6R1DA01# |                    |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM0332C2A4R7CA01# |                    |        |               | 6.2pF   | ±0.05pF | GRM0332C2A6R2WA01# |                    |                    |                    |  |
|        |               | 4.8pF   |       | ±0.05pF | GRM0332C2A4R8WA01# |                    |        |               |         | ±0.1pF  | GRM0332C2A6R2BA01# |                    |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A4R8BA01# |                    |        |               |         | ±0.25pF | GRM0332C2A6R2CA01# |                    |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM0332C2A4R8CA01# |                    |        |               |         | ±0.5pF  | GRM0332C2A6R2DA01# |                    |                    |                    |  |
|        |               | 4.9pF   |       | ±0.05pF | GRM0332C2A4R9WA01# |                    |        |               | 6.3pF   | ±0.05pF | GRM0332C2A6R3WA01# |                    |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A4R9BA01# |                    |        |               |         | ±0.1pF  | GRM0332C2A6R3BA01# |                    |                    |                    |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.6×0.3mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 0.33mm | 100Vdc        | CH      | 6.3pF | ±0.25pF | GRM0332C2A6R3CA01# |  | 0.33mm | 100Vdc        | CH      | 7.7pF | ±0.05pF | GRM0332C2A7R7WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C2A6R3DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C2A7R7BA01# |  |
|        |               |         | 6.4pF | ±0.05pF | GRM0332C2A6R4WA01# |  |        |               |         |       | ±0.25pF | GRM0332C2A7R7CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A6R4BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C2A7R7DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C2A6R4CA01# |  |        |               |         | 7.8pF | ±0.05pF | GRM0332C2A7R8WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C2A6R4DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C2A7R8BA01# |  |
|        |               |         | 6.5pF | ±0.05pF | GRM0332C2A6R5WA01# |  |        |               |         |       | ±0.25pF | GRM0332C2A7R8CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A6R5BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C2A7R8DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C2A6R5CA01# |  |        |               |         | 7.9pF | ±0.05pF | GRM0332C2A7R9WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C2A6R5DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C2A7R9BA01# |  |
|        |               |         | 6.6pF | ±0.05pF | GRM0332C2A6R6WA01# |  |        |               |         |       | ±0.25pF | GRM0332C2A7R9CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A6R6BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C2A7R9DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C2A6R6CA01# |  |        |               |         | 8.0pF | ±0.05pF | GRM0332C2A8R0WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C2A6R6DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C2A8R0BA01# |  |
|        |               |         | 6.7pF | ±0.05pF | GRM0332C2A6R7WA01# |  |        |               |         |       | ±0.25pF | GRM0332C2A8R0CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A6R7BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C2A8R0DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C2A6R7CA01# |  |        |               |         | 8.1pF | ±0.05pF | GRM0332C2A8R1WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C2A6R7DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C2A8R1BA01# |  |
|        |               |         | 6.8pF | ±0.05pF | GRM0332C2A6R8WA01# |  |        |               |         |       | ±0.25pF | GRM0332C2A8R1CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A6R8BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C2A8R1DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C2A6R8CA01# |  |        |               |         | 8.2pF | ±0.05pF | GRM0332C2A8R2WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C2A6R8DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C2A8R2BA01# |  |
|        |               |         | 6.9pF | ±0.05pF | GRM0332C2A6R9WA01# |  |        |               |         |       | ±0.25pF | GRM0332C2A8R2CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A6R9BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C2A8R2DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C2A6R9CA01# |  |        |               |         | 8.3pF | ±0.05pF | GRM0332C2A8R3WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C2A6R9DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C2A8R3BA01# |  |
|        |               |         | 7.0pF | ±0.05pF | GRM0332C2A7R0WA01# |  |        |               |         |       | ±0.25pF | GRM0332C2A8R3CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A7R0BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C2A8R3DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C2A7R0CA01# |  |        |               |         | 8.4pF | ±0.05pF | GRM0332C2A8R4WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C2A7R0DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C2A8R4BA01# |  |
|        |               |         | 7.1pF | ±0.05pF | GRM0332C2A7R1WA01# |  |        |               |         |       | ±0.25pF | GRM0332C2A8R4CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A7R1BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C2A8R4DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C2A7R1CA01# |  |        |               |         | 8.5pF | ±0.05pF | GRM0332C2A8R5WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C2A7R1DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C2A8R5BA01# |  |
|        |               |         | 7.2pF | ±0.05pF | GRM0332C2A7R2WA01# |  |        |               |         |       | ±0.25pF | GRM0332C2A8R5CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A7R2BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C2A8R5DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C2A7R2CA01# |  |        |               |         | 8.6pF | ±0.05pF | GRM0332C2A8R6WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C2A7R2DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C2A8R6BA01# |  |
|        |               |         | 7.3pF | ±0.05pF | GRM0332C2A7R3WA01# |  |        |               |         |       | ±0.25pF | GRM0332C2A8R6CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A7R3BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C2A8R6DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C2A7R3CA01# |  |        |               |         | 8.7pF | ±0.05pF | GRM0332C2A8R7WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C2A7R3DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C2A8R7BA01# |  |
|        |               |         | 7.4pF | ±0.05pF | GRM0332C2A7R4WA01# |  |        |               |         |       | ±0.25pF | GRM0332C2A8R7CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A7R4BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C2A8R7DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C2A7R4CA01# |  |        |               |         | 8.8pF | ±0.05pF | GRM0332C2A8R8WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C2A7R4DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C2A8R8BA01# |  |
|        |               |         | 7.5pF | ±0.05pF | GRM0332C2A7R5WA01# |  |        |               |         |       | ±0.25pF | GRM0332C2A8R8CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A7R5BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C2A8R8DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C2A7R5CA01# |  |        |               |         | 8.9pF | ±0.05pF | GRM0332C2A8R9WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C2A7R5DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C2A8R9BA01# |  |
|        |               |         | 7.6pF | ±0.05pF | GRM0332C2A7R6WA01# |  |        |               |         |       | ±0.25pF | GRM0332C2A8R9CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C2A7R6BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C2A8R9DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C2A7R6CA01# |  |        |               |         | 9.0pF | ±0.05pF | GRM0332C2A9R0WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C2A7R6DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C2A9R0BA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.6×0.3mm)

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |  |
|--------|---------------|---------|--------|---------|--------------------|--|
| 0.33mm | 100Vdc        | CH      | 9.0pF  | ±0.25pF | GRM0332C2A9R0CA01# |  |
|        |               |         |        | ±0.5pF  | GRM0332C2A9R0DA01# |  |
|        |               |         | 9.1pF  | ±0.05pF | GRM0332C2A9R1WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0332C2A9R1BA01# |  |
|        |               |         |        | ±0.25pF | GRM0332C2A9R1CA01# |  |
|        |               |         |        | ±0.5pF  | GRM0332C2A9R1DA01# |  |
|        |               |         | 9.2pF  | ±0.05pF | GRM0332C2A9R2WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0332C2A9R2BA01# |  |
|        |               |         |        | ±0.25pF | GRM0332C2A9R2CA01# |  |
|        |               |         |        | ±0.5pF  | GRM0332C2A9R2DA01# |  |
|        |               |         | 9.3pF  | ±0.05pF | GRM0332C2A9R3WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0332C2A9R3BA01# |  |
|        |               |         |        | ±0.25pF | GRM0332C2A9R3CA01# |  |
|        |               |         |        | ±0.5pF  | GRM0332C2A9R3DA01# |  |
|        |               |         | 9.4pF  | ±0.05pF | GRM0332C2A9R4WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0332C2A9R4BA01# |  |
|        |               |         |        | ±0.25pF | GRM0332C2A9R4CA01# |  |
|        |               |         |        | ±0.5pF  | GRM0332C2A9R4DA01# |  |
|        |               |         | 9.5pF  | ±0.05pF | GRM0332C2A9R5WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0332C2A9R5BA01# |  |
|        |               |         |        | ±0.25pF | GRM0332C2A9R5CA01# |  |
|        |               |         |        | ±0.5pF  | GRM0332C2A9R5DA01# |  |
|        |               |         | 9.6pF  | ±0.05pF | GRM0332C2A9R6WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0332C2A9R6BA01# |  |
|        |               |         |        | ±0.25pF | GRM0332C2A9R6CA01# |  |
|        |               |         |        | ±0.5pF  | GRM0332C2A9R6DA01# |  |
|        |               |         | 9.7pF  | ±0.05pF | GRM0332C2A9R7WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0332C2A9R7BA01# |  |
|        |               |         |        | ±0.25pF | GRM0332C2A9R7CA01# |  |
|        |               |         |        | ±0.5pF  | GRM0332C2A9R7DA01# |  |
|        |               |         | 9.8pF  | ±0.05pF | GRM0332C2A9R8WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0332C2A9R8BA01# |  |
|        |               |         |        | ±0.25pF | GRM0332C2A9R8CA01# |  |
|        |               |         |        | ±0.5pF  | GRM0332C2A9R8DA01# |  |
|        |               |         | 9.9pF  | ±0.05pF | GRM0332C2A9R9WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0332C2A9R9BA01# |  |
|        |               |         |        | ±0.25pF | GRM0332C2A9R9CA01# |  |
|        |               |         |        | ±0.5pF  | GRM0332C2A9R9DA01# |  |
|        |               |         | 10pF   | ±2%     | GRM0332C2A100GA01# |  |
|        |               |         |        | ±5%     | GRM0332C2A100JA01# |  |
|        |               |         | 12pF   | ±2%     | GRM0332C2A120GA01# |  |
|        |               |         |        | ±5%     | GRM0332C2A120JA01# |  |
|        |               |         | 15pF   | ±2%     | GRM0332C2A150GA01# |  |
|        |               |         |        | ±5%     | GRM0332C2A150JA01# |  |
|        | 50Vdc         | COG     | 0.10pF | ±0.05pF | GRM0335C1HR10WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1HR20BA01# |  |
|        |               |         | 0.20pF | ±0.05pF | GRM0335C1HR20WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1HR30BA01# |  |
|        |               |         | 0.30pF | ±0.05pF | GRM0335C1HR30WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1HR40BA01# |  |
|        |               |         | 0.40pF | ±0.05pF | GRM0335C1HR40WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1HR50BA01# |  |
|        |               |         | 0.50pF | ±0.05pF | GRM0335C1HR50WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1HR60BA01# |  |
|        |               |         | 0.60pF | ±0.05pF | GRM0335C1HR60WA01# |  |

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |  |
|--------|---------------|---------|--------|---------|--------------------|--|
| 0.33mm | 50Vdc         | COG     | 0.60pF | ±0.1pF  | GRM0335C1HR60BA01# |  |
|        |               |         |        | ±0.05pF | GRM0335C1HR70WA01# |  |
|        |               |         | 0.70pF | ±0.05pF | GRM0335C1HR70WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1HR70BA01# |  |
|        |               |         | 0.80pF | ±0.05pF | GRM0335C1HR80WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1HR80BA01# |  |
|        |               |         | 0.90pF | ±0.05pF | GRM0335C1HR90WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1HR90BA01# |  |
|        |               |         | 1.0pF  | ±0.05pF | GRM0335C1H1R0WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1H1R0BA01# |  |
|        |               |         |        | ±0.25pF | GRM0335C1H1R0CA01# |  |
|        |               |         | 1.1pF  | ±0.05pF | GRM0335C1H1R1WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1H1R1BA01# |  |
|        |               |         |        | ±0.25pF | GRM0335C1H1R1CA01# |  |
|        |               |         | 1.2pF  | ±0.05pF | GRM0335C1H1R2WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1H1R2BA01# |  |
|        |               |         |        | ±0.25pF | GRM0335C1H1R2CA01# |  |
|        |               |         | 1.3pF  | ±0.05pF | GRM0335C1H1R3WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1H1R3BA01# |  |
|        |               |         |        | ±0.25pF | GRM0335C1H1R3CA01# |  |
|        |               |         | 1.4pF  | ±0.05pF | GRM0335C1H1R4WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1H1R4BA01# |  |
|        |               |         |        | ±0.25pF | GRM0335C1H1R4CA01# |  |
|        |               |         | 1.5pF  | ±0.05pF | GRM0335C1H1R5WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1H1R5BA01# |  |
|        |               |         |        | ±0.25pF | GRM0335C1H1R5CA01# |  |
|        |               |         | 1.6pF  | ±0.05pF | GRM0335C1H1R6WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1H1R6BA01# |  |
|        |               |         |        | ±0.25pF | GRM0335C1H1R6CA01# |  |
|        |               |         | 1.7pF  | ±0.05pF | GRM0335C1H1R7WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1H1R7BA01# |  |
|        |               |         |        | ±0.25pF | GRM0335C1H1R7CA01# |  |
|        |               |         | 1.8pF  | ±0.05pF | GRM0335C1H1R8WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1H1R8BA01# |  |
|        |               |         |        | ±0.25pF | GRM0335C1H1R8CA01# |  |
|        |               |         | 1.9pF  | ±0.05pF | GRM0335C1H1R9WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1H1R9BA01# |  |
|        |               |         |        | ±0.25pF | GRM0335C1H1R9CA01# |  |
|        |               |         | 2.0pF  | ±0.05pF | GRM0335C1H2R0WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1H2R0BA01# |  |
|        |               |         |        | ±0.25pF | GRM0335C1H2R0CA01# |  |
|        |               |         | 2.1pF  | ±0.05pF | GRM0335C1H2R1WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1H2R1BA01# |  |
|        |               |         |        | ±0.25pF | GRM0335C1H2R1CA01# |  |
|        |               |         | 2.2pF  | ±0.05pF | GRM0335C1H2R2WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1H2R2BA01# |  |
|        |               |         |        | ±0.25pF | GRM0335C1H2R2CA01# |  |
|        |               |         | 2.3pF  | ±0.05pF | GRM0335C1H2R3WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1H2R3BA01# |  |
|        |               |         |        | ±0.25pF | GRM0335C1H2R3CA01# |  |
|        |               |         | 2.4pF  | ±0.05pF | GRM0335C1H2R4WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1H2R4BA01# |  |
|        |               |         |        | ±0.25pF | GRM0335C1H2R4CA01# |  |
|        |               |         | 2.5pF  | ±0.05pF | GRM0335C1H2R5WA01# |  |
|        |               |         |        | ±0.1pF  | GRM0335C1H2R5BA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.6×0.3mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 0.33mm | 50Vdc         | COG     | 2.5pF | ±0.25pF | GRM0335C1H2R5CA01# |  | 0.33mm | 50Vdc         | COG     | 4.3pF | ±0.25pF | GRM0335C1H4R3CA01# |  |
|        |               |         |       | ±0.05pF | GRM0335C1H2R6WA01# |  |        |               |         |       | ±0.05pF | GRM0335C1H4R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H2R6BA01# |  |        |               |         |       | ±0.1pF  | GRM0335C1H4R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H2R6CA01# |  |        |               |         |       | ±0.25pF | GRM0335C1H4R4CA01# |  |
|        |               |         | 2.7pF | ±0.05pF | GRM0335C1H2R7WA01# |  |        |               |         | 4.5pF | ±0.05pF | GRM0335C1H4R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H2R7BA01# |  |        |               |         |       | ±0.1pF  | GRM0335C1H4R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H2R7CA01# |  |        |               |         |       | ±0.25pF | GRM0335C1H4R5CA01# |  |
|        |               |         | 2.8pF | ±0.05pF | GRM0335C1H2R8WA01# |  |        |               |         | 4.6pF | ±0.05pF | GRM0335C1H4R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H2R8BA01# |  |        |               |         |       | ±0.1pF  | GRM0335C1H4R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H2R8CA01# |  |        |               |         |       | ±0.25pF | GRM0335C1H4R6CA01# |  |
|        |               |         | 2.9pF | ±0.05pF | GRM0335C1H2R9WA01# |  |        |               |         | 4.7pF | ±0.05pF | GRM0335C1H4R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H2R9BA01# |  |        |               |         |       | ±0.1pF  | GRM0335C1H4R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H2R9CA01# |  |        |               |         |       | ±0.25pF | GRM0335C1H4R7CA01# |  |
|        |               |         | 3.0pF | ±0.05pF | GRM0335C1H3R0WA01# |  |        |               |         | 4.8pF | ±0.05pF | GRM0335C1H4R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H3R0BA01# |  |        |               |         |       | ±0.1pF  | GRM0335C1H4R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H3R0CA01# |  |        |               |         |       | ±0.25pF | GRM0335C1H4R8CA01# |  |
|        |               |         | 3.1pF | ±0.05pF | GRM0335C1H3R1WA01# |  |        |               |         | 4.9pF | ±0.05pF | GRM0335C1H4R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H3R1BA01# |  |        |               |         |       | ±0.1pF  | GRM0335C1H4R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H3R1CA01# |  |        |               |         |       | ±0.25pF | GRM0335C1H4R9CA01# |  |
|        |               |         | 3.2pF | ±0.05pF | GRM0335C1H3R2WA01# |  |        |               |         | 5.0pF | ±0.05pF | GRM0335C1H5R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H3R2BA01# |  |        |               |         |       | ±0.1pF  | GRM0335C1H5R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H3R2CA01# |  |        |               |         |       | ±0.25pF | GRM0335C1H5R0CA01# |  |
|        |               |         | 3.3pF | ±0.05pF | GRM0335C1H3R3WA01# |  |        |               |         | 5.1pF | ±0.05pF | GRM0335C1H5R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H3R3BA01# |  |        |               |         |       | ±0.1pF  | GRM0335C1H5R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H3R3CA01# |  |        |               |         |       | ±0.25pF | GRM0335C1H5R1CA01# |  |
|        |               |         | 3.4pF | ±0.05pF | GRM0335C1H3R4WA01# |  |        |               |         | 5.2pF | ±0.05pF | GRM0335C1H5R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H3R4BA01# |  |        |               |         |       | ±0.1pF  | GRM0335C1H5R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H3R4CA01# |  |        |               |         |       | ±0.25pF | GRM0335C1H5R2CA01# |  |
|        |               |         | 3.5pF | ±0.05pF | GRM0335C1H3R5WA01# |  |        |               |         | 5.3pF | ±0.05pF | GRM0335C1H5R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H3R5BA01# |  |        |               |         |       | ±0.1pF  | GRM0335C1H5R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H3R5CA01# |  |        |               |         |       | ±0.25pF | GRM0335C1H5R3CA01# |  |
|        |               |         | 3.6pF | ±0.05pF | GRM0335C1H3R6WA01# |  |        |               |         | 5.4pF | ±0.05pF | GRM0335C1H5R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H3R6BA01# |  |        |               |         |       | ±0.1pF  | GRM0335C1H5R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H3R6CA01# |  |        |               |         |       | ±0.25pF | GRM0335C1H5R4CA01# |  |
|        |               |         | 3.7pF | ±0.05pF | GRM0335C1H3R7WA01# |  |        |               |         | 5.5pF | ±0.05pF | GRM0335C1H5R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H3R7BA01# |  |        |               |         |       | ±0.1pF  | GRM0335C1H5R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H3R7CA01# |  |        |               |         |       | ±0.25pF | GRM0335C1H5R5CA01# |  |
|        |               |         | 3.8pF | ±0.05pF | GRM0335C1H3R8WA01# |  |        |               |         | 5.6pF | ±0.05pF | GRM0335C1H5R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H3R8BA01# |  |        |               |         |       | ±0.1pF  | GRM0335C1H5R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H3R8CA01# |  |        |               |         |       | ±0.25pF | GRM0335C1H5R6CA01# |  |
|        |               |         | 3.9pF | ±0.05pF | GRM0335C1H3R9WA01# |  |        |               |         | 5.7pF | ±0.05pF | GRM0335C1H5R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H3R9BA01# |  |        |               |         |       | ±0.1pF  | GRM0335C1H5R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H3R9CA01# |  |        |               |         |       | ±0.25pF | GRM0335C1H5R7CA01# |  |
|        |               |         | 4.0pF | ±0.05pF | GRM0335C1H4R0WA01# |  |        |               |         | 5.8pF | ±0.05pF | GRM0335C1H5R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H4R0BA01# |  |        |               |         |       | ±0.1pF  | GRM0335C1H5R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H4R0CA01# |  |        |               |         |       | ±0.25pF | GRM0335C1H5R8CA01# |  |
|        |               |         | 4.1pF | ±0.05pF | GRM0335C1H4R1WA01# |  |        |               |         |       | ±0.5pF  | GRM0335C1H5R8DA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H4R1BA01# |  |        |               |         |       |         |                    |  |
|        |               |         |       | ±0.25pF | GRM0335C1H4R1CA01# |  |        |               |         |       |         |                    |  |
|        |               |         | 4.2pF | ±0.05pF | GRM0335C1H4R2WA01# |  |        |               |         |       |         |                    |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H4R2BA01# |  |        |               |         |       |         |                    |  |
|        |               |         |       | ±0.25pF | GRM0335C1H4R2CA01# |  |        |               |         |       |         |                    |  |
|        |               |         | 4.3pF | ±0.05pF | GRM0335C1H4R3WA01# |  |        |               |         |       |         |                    |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H4R3BA01# |  |        |               |         |       |         |                    |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.6×0.3mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.33mm | 50Vdc         | COG     | 5.9pF | ±0.05pF | GRM0335C1H5R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H5R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H5R9CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H5R9DA01# |  |
|        |               |         | 6.0pF | ±0.05pF | GRM0335C1H6R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H6R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H6R0CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H6R0DA01# |  |
|        |               |         | 6.1pF | ±0.05pF | GRM0335C1H6R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H6R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H6R1CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H6R1DA01# |  |
|        |               |         | 6.2pF | ±0.05pF | GRM0335C1H6R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H6R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H6R2CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H6R2DA01# |  |
|        |               |         | 6.3pF | ±0.05pF | GRM0335C1H6R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H6R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H6R3CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H6R3DA01# |  |
|        |               |         | 6.4pF | ±0.05pF | GRM0335C1H6R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H6R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H6R4CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H6R4DA01# |  |
|        |               |         | 6.5pF | ±0.05pF | GRM0335C1H6R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H6R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H6R5CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H6R5DA01# |  |
|        |               |         | 6.6pF | ±0.05pF | GRM0335C1H6R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H6R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H6R6CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H6R6DA01# |  |
|        |               |         | 6.7pF | ±0.05pF | GRM0335C1H6R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H6R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H6R7CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H6R7DA01# |  |
|        |               |         | 6.8pF | ±0.05pF | GRM0335C1H6R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H6R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H6R8CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H6R8DA01# |  |
|        |               |         | 6.9pF | ±0.05pF | GRM0335C1H6R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H6R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H6R9CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H6R9DA01# |  |
|        |               |         | 7.0pF | ±0.05pF | GRM0335C1H7R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H7R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H7R0CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H7R0DA01# |  |
|        |               |         | 7.1pF | ±0.05pF | GRM0335C1H7R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H7R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H7R1CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H7R1DA01# |  |
|        |               |         | 7.2pF | ±0.05pF | GRM0335C1H7R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H7R2BA01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.33mm | 50Vdc         | COG     | 7.2pF | ±0.25pF | GRM0335C1H7R2CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H7R2DA01# |  |
|        |               |         | 7.3pF | ±0.05pF | GRM0335C1H7R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H7R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H7R3CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H7R3DA01# |  |
|        |               |         | 7.4pF | ±0.05pF | GRM0335C1H7R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H7R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H7R4CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H7R4DA01# |  |
|        |               |         | 7.5pF | ±0.05pF | GRM0335C1H7R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H7R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H7R5CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H7R5DA01# |  |
|        |               |         | 7.6pF | ±0.05pF | GRM0335C1H7R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H7R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H7R6CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H7R6DA01# |  |
|        |               |         | 7.7pF | ±0.05pF | GRM0335C1H7R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H7R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H7R7CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H7R7DA01# |  |
|        |               |         | 7.8pF | ±0.05pF | GRM0335C1H7R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H7R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H7R8CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H7R8DA01# |  |
|        |               |         | 7.9pF | ±0.05pF | GRM0335C1H7R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H7R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H7R9CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H7R9DA01# |  |
|        |               |         | 8.0pF | ±0.05pF | GRM0335C1H8R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H8R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H8R0CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H8R0DA01# |  |
|        |               |         | 8.1pF | ±0.05pF | GRM0335C1H8R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H8R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H8R1CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H8R1DA01# |  |
|        |               |         | 8.2pF | ±0.05pF | GRM0335C1H8R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H8R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H8R2CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H8R2DA01# |  |
|        |               |         | 8.3pF | ±0.05pF | GRM0335C1H8R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H8R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H8R3CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H8R3DA01# |  |
|        |               |         | 8.4pF | ±0.05pF | GRM0335C1H8R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H8R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H8R4CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H8R4DA01# |  |
|        |               |         | 8.5pF | ±0.05pF | GRM0335C1H8R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H8R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H8R5CA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H8R5DA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.6×0.3mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|--------|---------|--------------------|--|
| 0.33mm | 50Vdc         | COG     | 8.6pF | ±0.05pF | GRM0335C1H8R6WA01# |  | 0.33mm | 50Vdc         | COG     | 9.9pF  | ±0.25pF | GRM0335C1H9R9CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H8R6BA01# |  |        |               |         |        | ±0.5pF  | GRM0335C1H9R9DA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H8R6CA01# |  |        |               |         | 10pF   | ±2%     | GRM0335C1H100GA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H8R6DA01# |  |        |               |         |        | ±5%     | GRM0335C1H100JA01# |  |
|        |               |         | 8.7pF | ±0.05pF | GRM0335C1H8R7WA01# |  |        |               |         | 12pF   | ±2%     | GRM0335C1H120GA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H8R7BA01# |  |        |               |         |        | ±5%     | GRM0335C1H120JA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H8R7CA01# |  |        |               |         | 15pF   | ±2%     | GRM0335C1H150GA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H8R7DA01# |  |        |               |         |        | ±5%     | GRM0335C1H150JA01# |  |
|        |               |         | 8.8pF | ±0.05pF | GRM0335C1H8R8WA01# |  |        |               |         | 18pF   | ±2%     | GRM0335C1H180GA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H8R8BA01# |  |        |               |         |        | ±5%     | GRM0335C1H180JA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H8R8CA01# |  |        |               |         | 22pF   | ±2%     | GRM0335C1H220GA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H8R8DA01# |  |        |               |         |        | ±5%     | GRM0335C1H220JA01# |  |
|        |               |         | 8.9pF | ±0.05pF | GRM0335C1H8R9WA01# |  |        |               |         | 27pF   | ±2%     | GRM0335C1H270GA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H8R9BA01# |  |        |               |         |        | ±5%     | GRM0335C1H270JA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H8R9CA01# |  |        |               |         | 33pF   | ±2%     | GRM0335C1H330GA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H8R9DA01# |  |        |               |         |        | ±5%     | GRM0335C1H330JA01# |  |
|        |               |         | 9.0pF | ±0.05pF | GRM0335C1H9R0WA01# |  |        |               |         | 39pF   | ±2%     | GRM0335C1H390GA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H9R0BA01# |  |        |               |         |        | ±5%     | GRM0335C1H390JA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H9R0CA01# |  |        |               |         | 47pF   | ±2%     | GRM0335C1H470GA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H9R0DA01# |  |        |               |         |        | ±5%     | GRM0335C1H470JA01# |  |
|        |               |         | 9.1pF | ±0.05pF | GRM0335C1H9R1WA01# |  |        |               |         | 56pF   | ±2%     | GRM0335C1H560GA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H9R1BA01# |  |        |               |         |        | ±5%     | GRM0335C1H560JA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H9R1CA01# |  |        |               |         | 68pF   | ±2%     | GRM0335C1H680GA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H9R1DA01# |  |        |               |         |        | ±5%     | GRM0335C1H680JA01# |  |
|        |               |         | 9.2pF | ±0.05pF | GRM0335C1H9R2WA01# |  |        |               |         | 82pF   | ±2%     | GRM0335C1H820GA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H9R2BA01# |  |        |               |         |        | ±5%     | GRM0335C1H820JA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H9R2CA01# |  |        |               |         | 100pF  | ±2%     | GRM0335C1H101GA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H9R2DA01# |  |        |               |         |        | ±5%     | GRM0335C1H101JA01# |  |
|        |               |         | 9.3pF | ±0.05pF | GRM0335C1H9R3WA01# |  |        |               |         | 120pF  | ±2%     | GRM0335C1H121GA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H9R3BA01# |  |        |               |         |        | ±5%     | GRM0335C1H121JA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H9R3CA01# |  |        |               |         | 150pF  | ±2%     | GRM0335C1H151GA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H9R3DA01# |  |        |               |         |        | ±5%     | GRM0335C1H151JA01# |  |
|        |               |         | 9.4pF | ±0.05pF | GRM0335C1H9R4WA01# |  |        |               |         | 180pF  | ±2%     | GRM0335C1H181GA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H9R4BA01# |  |        |               |         |        | ±5%     | GRM0335C1H181JA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H9R4CA01# |  |        |               |         | 220pF  | ±2%     | GRM0335C1H221GA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H9R4DA01# |  |        |               |         |        | ±5%     | GRM0335C1H221JA01# |  |
|        |               |         | 9.5pF | ±0.05pF | GRM0335C1H9R5WA01# |  |        |               | CK      | 0.10pF | ±0.05pF | GRM0334C1HR10WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H9R5BA01# |  |        |               |         |        | ±0.05pF | GRM0334C1HR20WA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H9R5CA01# |  |        |               |         |        | ±0.1pF  | GRM0334C1HR20BA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H9R5DA01# |  |        |               |         | 0.30pF | ±0.05pF | GRM0334C1HR30WA01# |  |
|        |               |         | 9.6pF | ±0.05pF | GRM0335C1H9R6WA01# |  |        |               |         |        | ±0.1pF  | GRM0334C1HR30BA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H9R6BA01# |  |        |               |         | 0.40pF | ±0.05pF | GRM0334C1HR40WA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H9R6CA01# |  |        |               |         |        | ±0.1pF  | GRM0334C1HR40BA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H9R6DA01# |  |        |               |         | 0.50pF | ±0.05pF | GRM0334C1HR50WA01# |  |
|        |               |         | 9.7pF | ±0.05pF | GRM0335C1H9R7WA01# |  |        |               |         |        | ±0.1pF  | GRM0334C1HR50BA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H9R7BA01# |  |        |               |         | 0.60pF | ±0.05pF | GRM0334C1HR60WA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H9R7CA01# |  |        |               |         |        | ±0.1pF  | GRM0334C1HR60BA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H9R7DA01# |  |        |               |         | 0.70pF | ±0.05pF | GRM0334C1HR70WA01# |  |
|        |               |         | 9.8pF | ±0.05pF | GRM0335C1H9R8WA01# |  |        |               |         |        | ±0.1pF  | GRM0334C1HR70BA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H9R8BA01# |  |        |               |         | 0.80pF | ±0.05pF | GRM0334C1HR80WA01# |  |
|        |               |         |       | ±0.25pF | GRM0335C1H9R8CA01# |  |        |               |         |        | ±0.1pF  | GRM0334C1HR80BA01# |  |
|        |               |         |       | ±0.5pF  | GRM0335C1H9R8DA01# |  |        |               |         | 0.90pF | ±0.05pF | GRM0334C1HR90WA01# |  |
|        |               |         | 9.9pF | ±0.05pF | GRM0335C1H9R9WA01# |  |        |               |         |        | ±0.1pF  | GRM0334C1HR90BA01# |  |
|        |               |         |       | ±0.1pF  | GRM0335C1H9R9BA01# |  |        |               |         | 1.0pF  | ±0.05pF | GRM0334C1H1R0WA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.6×0.3mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 0.33mm | 50Vdc         | CK      | 1.0pF | ±0.1pF  | GRM0334C1H1R0BA01# |  | 0.33mm | 50Vdc         | CJ      | 2.8pF | ±0.1pF  | GRM0333C1H2R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM0334C1H1R0CA01# |  |        |               |         |       | ±0.25pF | GRM0333C1H2R8CA01# |  |
|        |               |         |       |         |                    |  |        |               |         |       |         |                    |  |
|        |               |         | 1.1pF | ±0.05pF | GRM0334C1H1R1WA01# |  |        |               |         | 2.9pF | ±0.05pF | GRM0333C1H2R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0334C1H1R1BA01# |  |        |               |         |       | ±0.1pF  | GRM0333C1H2R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM0334C1H1R1CA01# |  |        |               |         |       | ±0.25pF | GRM0333C1H2R9CA01# |  |
|        |               |         | 1.2pF | ±0.05pF | GRM0334C1H1R2WA01# |  |        |               |         | 3.0pF | ±0.05pF | GRM0333C1H3R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0334C1H1R2BA01# |  |        |               |         |       | ±0.1pF  | GRM0333C1H3R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM0334C1H1R2CA01# |  |        |               |         |       | ±0.25pF | GRM0333C1H3R0CA01# |  |
|        |               |         | 1.3pF | ±0.05pF | GRM0334C1H1R3WA01# |  |        |               |         | 3.1pF | ±0.05pF | GRM0333C1H3R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0334C1H1R3BA01# |  |        |               |         |       | ±0.1pF  | GRM0333C1H3R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM0334C1H1R3CA01# |  |        |               |         |       | ±0.25pF | GRM0333C1H3R1CA01# |  |
|        |               |         | 1.4pF | ±0.05pF | GRM0334C1H1R4WA01# |  |        |               |         | 3.2pF | ±0.05pF | GRM0333C1H3R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0334C1H1R4BA01# |  |        |               |         |       | ±0.1pF  | GRM0333C1H3R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM0334C1H1R4CA01# |  |        |               |         |       | ±0.25pF | GRM0333C1H3R2CA01# |  |
|        |               |         | 1.5pF | ±0.05pF | GRM0334C1H1R5WA01# |  |        |               |         | 3.3pF | ±0.05pF | GRM0333C1H3R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0334C1H1R5BA01# |  |        |               |         |       | ±0.1pF  | GRM0333C1H3R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM0334C1H1R5CA01# |  |        |               |         |       | ±0.25pF | GRM0333C1H3R3CA01# |  |
|        |               |         | 1.6pF | ±0.05pF | GRM0334C1H1R6WA01# |  |        |               |         | 3.4pF | ±0.05pF | GRM0333C1H3R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0334C1H1R6BA01# |  |        |               |         |       | ±0.1pF  | GRM0333C1H3R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM0334C1H1R6CA01# |  |        |               |         |       | ±0.25pF | GRM0333C1H3R4CA01# |  |
|        |               |         | 1.7pF | ±0.05pF | GRM0334C1H1R7WA01# |  |        |               |         | 3.5pF | ±0.05pF | GRM0333C1H3R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0334C1H1R7BA01# |  |        |               |         |       | ±0.1pF  | GRM0333C1H3R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM0334C1H1R7CA01# |  |        |               |         |       | ±0.25pF | GRM0333C1H3R5CA01# |  |
|        |               |         | 1.8pF | ±0.05pF | GRM0334C1H1R8WA01# |  |        |               |         | 3.6pF | ±0.05pF | GRM0333C1H3R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0334C1H1R8BA01# |  |        |               |         |       | ±0.1pF  | GRM0333C1H3R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM0334C1H1R8CA01# |  |        |               |         |       | ±0.25pF | GRM0333C1H3R6CA01# |  |
|        |               |         | 1.9pF | ±0.05pF | GRM0334C1H1R9WA01# |  |        |               |         | 3.7pF | ±0.05pF | GRM0333C1H3R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0334C1H1R9BA01# |  |        |               |         |       | ±0.1pF  | GRM0333C1H3R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM0334C1H1R9CA01# |  |        |               |         |       | ±0.25pF | GRM0333C1H3R7CA01# |  |
|        |               |         | 2.0pF | ±0.05pF | GRM0334C1H2R0WA01# |  |        |               |         | 3.8pF | ±0.05pF | GRM0333C1H3R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0334C1H2R0BA01# |  |        |               |         |       | ±0.1pF  | GRM0333C1H3R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM0334C1H2R0CA01# |  |        |               |         |       | ±0.25pF | GRM0333C1H3R8CA01# |  |
|        |               | CJ      | 2.1pF | ±0.05pF | GRM0333C1H2R1WA01# |  |        |               |         | 3.9pF | ±0.05pF | GRM0333C1H3R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0333C1H2R1BA01# |  |        |               |         |       | ±0.1pF  | GRM0333C1H3R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM0333C1H2R1CA01# |  |        |               |         |       | ±0.25pF | GRM0333C1H3R9CA01# |  |
|        |               |         | 2.2pF | ±0.05pF | GRM0333C1H2R2WA01# |  |        |               | CH      | 4.0pF | ±0.05pF | GRM0332C1H4R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0333C1H2R2BA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H4R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM0333C1H2R2CA01# |  |        |               |         |       | ±0.25pF | GRM0332C1H4R0CA01# |  |
|        |               |         | 2.3pF | ±0.05pF | GRM0333C1H2R3WA01# |  |        |               |         | 4.1pF | ±0.05pF | GRM0332C1H4R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0333C1H2R3BA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H4R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM0333C1H2R3CA01# |  |        |               |         |       | ±0.25pF | GRM0332C1H4R1CA01# |  |
|        |               |         | 2.4pF | ±0.05pF | GRM0333C1H2R4WA01# |  |        |               |         | 4.2pF | ±0.05pF | GRM0332C1H4R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0333C1H2R4BA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H4R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM0333C1H2R4CA01# |  |        |               |         |       | ±0.25pF | GRM0332C1H4R2CA01# |  |
|        |               |         | 2.5pF | ±0.05pF | GRM0333C1H2R5WA01# |  |        |               |         | 4.3pF | ±0.05pF | GRM0332C1H4R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0333C1H2R5BA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H4R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM0333C1H2R5CA01# |  |        |               |         |       | ±0.25pF | GRM0332C1H4R3CA01# |  |
|        |               |         | 2.6pF | ±0.05pF | GRM0333C1H2R6WA01# |  |        |               |         | 4.4pF | ±0.05pF | GRM0332C1H4R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0333C1H2R6BA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H4R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM0333C1H2R6CA01# |  |        |               |         |       | ±0.25pF | GRM0332C1H4R4CA01# |  |
|        |               |         | 2.7pF | ±0.05pF | GRM0333C1H2R7WA01# |  |        |               |         | 4.5pF | ±0.05pF | GRM0332C1H4R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0333C1H2R7BA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H4R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM0333C1H2R7CA01# |  |        |               |         |       | ±0.25pF | GRM0332C1H4R5CA01# |  |
|        |               |         | 2.8pF | ±0.05pF | GRM0333C1H2R8WA01# |  |        |               |         | 4.6pF | ±0.05pF | GRM0332C1H4R6WA01# |  |
|        |               |         |       |         |                    |  |        |               |         |       |         |                    |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.6×0.3mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 0.33mm | 50Vdc         | CH      | 4.6pF | ±0.1pF  | GRM0332C1H4R6BA01# |  | 0.33mm | 50Vdc         | CH      | 6.1pF | ±0.05pF | GRM0332C1H6R1WA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H4R6CA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H6R1BA01# |  |
|        |               |         | 4.7pF | ±0.05pF | GRM0332C1H4R7WA01# |  |        |               |         |       | ±0.25pF | GRM0332C1H6R1CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H4R7BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H6R1DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H4R7CA01# |  |        |               |         | 6.2pF | ±0.05pF | GRM0332C1H6R2WA01# |  |
|        |               |         | 4.8pF | ±0.05pF | GRM0332C1H4R8WA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H6R2BA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H4R8BA01# |  |        |               |         |       | ±0.25pF | GRM0332C1H6R2CA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H4R8CA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H6R2DA01# |  |
|        |               |         | 4.9pF | ±0.05pF | GRM0332C1H4R9WA01# |  |        |               |         | 6.3pF | ±0.05pF | GRM0332C1H6R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H4R9BA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H6R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H4R9CA01# |  |        |               |         |       | ±0.25pF | GRM0332C1H6R3CA01# |  |
|        |               |         | 5.0pF | ±0.05pF | GRM0332C1H5R0WA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H6R3DA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H5R0BA01# |  |        |               |         | 6.4pF | ±0.05pF | GRM0332C1H6R4WA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H5R0CA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H6R4BA01# |  |
|        |               |         | 5.1pF | ±0.05pF | GRM0332C1H5R1WA01# |  |        |               |         |       | ±0.25pF | GRM0332C1H6R4CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H5R1BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H6R4DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H5R1CA01# |  |        |               |         | 6.5pF | ±0.05pF | GRM0332C1H6R5WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H5R1DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H6R5BA01# |  |
|        |               |         | 5.2pF | ±0.05pF | GRM0332C1H5R2WA01# |  |        |               |         |       | ±0.25pF | GRM0332C1H6R5CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H5R2BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H6R5DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H5R2CA01# |  |        |               |         | 6.6pF | ±0.05pF | GRM0332C1H6R6WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H5R2DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H6R6BA01# |  |
|        |               |         | 5.3pF | ±0.05pF | GRM0332C1H5R3WA01# |  |        |               |         |       | ±0.25pF | GRM0332C1H6R6CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H5R3BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H6R6DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H5R3CA01# |  |        |               |         | 6.7pF | ±0.05pF | GRM0332C1H6R7WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H5R3DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H6R7BA01# |  |
|        |               |         | 5.4pF | ±0.05pF | GRM0332C1H5R4WA01# |  |        |               |         |       | ±0.25pF | GRM0332C1H6R7CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H5R4BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H6R7DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H5R4CA01# |  |        |               |         | 6.8pF | ±0.05pF | GRM0332C1H6R8WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H5R4DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H6R8BA01# |  |
|        |               |         | 5.5pF | ±0.05pF | GRM0332C1H5R5WA01# |  |        |               |         |       | ±0.25pF | GRM0332C1H6R8CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H5R5BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H6R8DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H5R5CA01# |  |        |               |         | 6.9pF | ±0.05pF | GRM0332C1H6R9WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H5R5DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H6R9BA01# |  |
|        |               |         | 5.6pF | ±0.05pF | GRM0332C1H5R6WA01# |  |        |               |         |       | ±0.25pF | GRM0332C1H6R9CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H5R6BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H6R9DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H5R6CA01# |  |        |               |         | 7.0pF | ±0.05pF | GRM0332C1H7R0WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H5R6DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H7R0BA01# |  |
|        |               |         | 5.7pF | ±0.05pF | GRM0332C1H5R7WA01# |  |        |               |         |       | ±0.25pF | GRM0332C1H7R0CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H5R7BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H7R0DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H5R7CA01# |  |        |               |         | 7.1pF | ±0.05pF | GRM0332C1H7R1WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H5R7DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H7R1BA01# |  |
|        |               |         | 5.8pF | ±0.05pF | GRM0332C1H5R8WA01# |  |        |               |         |       | ±0.25pF | GRM0332C1H7R1CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H5R8BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H7R1DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H5R8CA01# |  |        |               |         | 7.2pF | ±0.05pF | GRM0332C1H7R2WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H5R8DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H7R2BA01# |  |
|        |               |         | 5.9pF | ±0.05pF | GRM0332C1H5R9WA01# |  |        |               |         |       | ±0.25pF | GRM0332C1H7R2CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H5R9BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H7R2DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H5R9CA01# |  |        |               |         | 7.3pF | ±0.05pF | GRM0332C1H7R3WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H5R9DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H7R3BA01# |  |
|        |               |         | 6.0pF | ±0.05pF | GRM0332C1H6R0WA01# |  |        |               |         |       | ±0.25pF | GRM0332C1H7R3CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H6R0BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H7R3DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H6R0CA01# |  |        |               |         | 7.4pF | ±0.05pF | GRM0332C1H7R4WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H6R0DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H7R4BA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.6×0.3mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 0.33mm | 50Vdc         | CH      | 7.4pF | ±0.25pF | GRM0332C1H7R4CA01# |  | 0.33mm | 50Vdc         | CH      | 8.8pF | ±0.05pF | GRM0332C1H8R8WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H7R4DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H8R8BA01# |  |
|        |               |         | 7.5pF | ±0.05pF | GRM0332C1H7R5WA01# |  |        |               |         | 8.9pF | ±0.25pF | GRM0332C1H8R8CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H7R5BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H8R8DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H7R5CA01# |  |        |               |         |       | ±0.05pF | GRM0332C1H8R9WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H7R5DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H8R9BA01# |  |
|        |               |         | 7.6pF | ±0.05pF | GRM0332C1H7R6WA01# |  |        |               |         | 9.0pF | ±0.25pF | GRM0332C1H8R9CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H7R6BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H8R9DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H7R6CA01# |  |        |               |         |       | ±0.05pF | GRM0332C1H9R0WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H7R6DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H9R0BA01# |  |
|        |               |         | 7.7pF | ±0.05pF | GRM0332C1H7R7WA01# |  |        |               |         | 9.1pF | ±0.25pF | GRM0332C1H9R0CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H7R7BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H9R0DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H7R7CA01# |  |        |               |         |       | ±0.05pF | GRM0332C1H9R1WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H7R7DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H9R1BA01# |  |
|        |               |         | 7.8pF | ±0.05pF | GRM0332C1H7R8WA01# |  |        |               |         | 9.2pF | ±0.25pF | GRM0332C1H9R1CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H7R8BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H9R1DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H7R8CA01# |  |        |               |         |       | ±0.05pF | GRM0332C1H9R2WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H7R8DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H9R2BA01# |  |
|        |               |         | 7.9pF | ±0.05pF | GRM0332C1H7R9WA01# |  |        |               |         | 9.3pF | ±0.25pF | GRM0332C1H9R2CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H7R9BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H9R2DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H7R9CA01# |  |        |               |         |       | ±0.05pF | GRM0332C1H9R3WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H7R9DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H9R3BA01# |  |
|        |               |         | 8.0pF | ±0.05pF | GRM0332C1H8R0WA01# |  |        |               |         | 9.4pF | ±0.25pF | GRM0332C1H9R3CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H8R0BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H9R3DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H8R0CA01# |  |        |               |         |       | ±0.05pF | GRM0332C1H9R4WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H8R0DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H9R4BA01# |  |
|        |               |         | 8.1pF | ±0.05pF | GRM0332C1H8R1WA01# |  |        |               |         | 9.5pF | ±0.25pF | GRM0332C1H9R4CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H8R1BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H9R4DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H8R1CA01# |  |        |               |         |       | ±0.05pF | GRM0332C1H9R5WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H8R1DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H9R5BA01# |  |
|        |               |         | 8.2pF | ±0.05pF | GRM0332C1H8R2WA01# |  |        |               |         | 9.6pF | ±0.25pF | GRM0332C1H9R5CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H8R2BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H9R5DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H8R2CA01# |  |        |               |         |       | ±0.05pF | GRM0332C1H9R6WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H8R2DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H9R6BA01# |  |
|        |               |         | 8.3pF | ±0.05pF | GRM0332C1H8R3WA01# |  |        |               |         | 9.7pF | ±0.25pF | GRM0332C1H9R6CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H8R3BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H9R6DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H8R3CA01# |  |        |               |         |       | ±0.05pF | GRM0332C1H9R7WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H8R3DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H9R7BA01# |  |
|        |               |         | 8.4pF | ±0.05pF | GRM0332C1H8R4WA01# |  |        |               |         | 9.8pF | ±0.25pF | GRM0332C1H9R7CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H8R4BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H9R7DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H8R4CA01# |  |        |               |         |       | ±0.05pF | GRM0332C1H9R8WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H8R4DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H9R8BA01# |  |
|        |               |         | 8.5pF | ±0.05pF | GRM0332C1H8R5WA01# |  |        |               |         | 9.9pF | ±0.25pF | GRM0332C1H9R8CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H8R5BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H9R8DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H8R5CA01# |  |        |               |         |       | ±0.05pF | GRM0332C1H9R9WA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H8R5DA01# |  |        |               |         |       | ±0.1pF  | GRM0332C1H9R9BA01# |  |
|        |               |         | 8.6pF | ±0.05pF | GRM0332C1H8R6WA01# |  |        |               |         | 10pF  | ±0.25pF | GRM0332C1H9R9CA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H8R6BA01# |  |        |               |         |       | ±0.5pF  | GRM0332C1H9R9DA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H8R6CA01# |  |        |               |         |       | ±2%     | GRM0332C1H100GA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H8R6DA01# |  |        |               |         |       | ±5%     | GRM0332C1H100JA01# |  |
|        |               |         | 8.7pF | ±0.05pF | GRM0332C1H8R7WA01# |  |        |               |         | 12pF  | ±2%     | GRM0332C1H120GA01# |  |
|        |               |         |       | ±0.1pF  | GRM0332C1H8R7BA01# |  |        |               |         |       | ±5%     | GRM0332C1H120JA01# |  |
|        |               |         |       | ±0.25pF | GRM0332C1H8R7CA01# |  |        |               |         | 15pF  | ±2%     | GRM0332C1H150GA01# |  |
|        |               |         |       | ±0.5pF  | GRM0332C1H8R7DA01# |  |        |               |         |       | ±5%     | GRM0332C1H150JA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 0.6×0.3mm)

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |  |
|--------|---------------|---------|--------|------|--------------------|--|
| 0.33mm | 50Vdc         | CH      | 18pF   | ±2%  | GRM0332C1H180GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1H180JA01# |  |
|        |               |         | 22pF   | ±2%  | GRM0332C1H220GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1H220JA01# |  |
|        |               |         | 27pF   | ±2%  | GRM0332C1H270GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1H270JA01# |  |
|        |               |         | 33pF   | ±2%  | GRM0332C1H330GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1H330JA01# |  |
|        |               |         | 39pF   | ±2%  | GRM0332C1H390GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1H390JA01# |  |
|        |               |         | 47pF   | ±2%  | GRM0332C1H470GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1H470JA01# |  |
|        |               |         | 56pF   | ±2%  | GRM0332C1H560GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1H560JA01# |  |
|        |               |         | 68pF   | ±2%  | GRM0332C1H680GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1H680JA01# |  |
|        |               |         | 82pF   | ±2%  | GRM0332C1H820GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1H820JA01# |  |
|        |               |         | 100pF  | ±2%  | GRM0332C1H101GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1H101JA01# |  |
|        |               |         | 120pF  | ±2%  | GRM0332C1H121GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1H121JA01# |  |
|        |               |         | 150pF  | ±2%  | GRM0332C1H151GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1H151JA01# |  |
|        |               |         | 180pF  | ±2%  | GRM0332C1H181GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1H181JA01# |  |
|        |               |         | 220pF  | ±2%  | GRM0332C1H221GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1H221JA01# |  |
|        | 25Vdc         | COG     | 270pF  | ±2%  | GRM0335C1E271GA01# |  |
|        |               |         |        | ±5%  | GRM0335C1E271JA01# |  |
|        |               |         | 330pF  | ±2%  | GRM0335C1E331GA01# |  |
|        |               |         |        | ±5%  | GRM0335C1E331JA01# |  |
|        |               |         | 390pF  | ±2%  | GRM0335C1E391GA01# |  |
|        |               |         |        | ±5%  | GRM0335C1E391JA01# |  |
|        |               |         | 470pF  | ±2%  | GRM0335C1E471GA01# |  |
|        |               |         |        | ±5%  | GRM0335C1E471JA01# |  |
|        |               |         | 560pF  | ±2%  | GRM0335C1E561GA01# |  |
|        |               |         |        | ±5%  | GRM0335C1E561JA01# |  |
|        |               |         | 680pF  | ±2%  | GRM0335C1E681GA01# |  |
|        |               |         |        | ±5%  | GRM0335C1E681JA01# |  |
|        |               |         | 820pF  | ±2%  | GRM0335C1E821GA01# |  |
|        |               |         |        | ±5%  | GRM0335C1E821JA01# |  |
|        |               |         | 910pF  | ±2%  | GRM0335C1E911GA01# |  |
|        |               |         |        | ±5%  | GRM0335C1E911JA01# |  |
|        |               |         | 1000pF | ±2%  | GRM0335C1E102GA01# |  |
|        |               |         |        | ±5%  | GRM0335C1E102JA01# |  |
|        |               | CH      | 270pF  | ±2%  | GRM0332C1E271GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1E271JA01# |  |
|        |               |         | 330pF  | ±2%  | GRM0332C1E331GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1E331JA01# |  |
|        |               |         | 390pF  | ±2%  | GRM0332C1E391GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1E391JA01# |  |
|        |               |         | 470pF  | ±2%  | GRM0332C1E471GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1E471JA01# |  |

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |  |
|--------|---------------|---------|--------|------|--------------------|--|
| 0.33mm | 25Vdc         | CH      | 560pF  | ±2%  | GRM0332C1E561GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1E561JA01# |  |
|        |               |         | 680pF  | ±2%  | GRM0332C1E681GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1E681JA01# |  |
|        |               |         | 820pF  | ±2%  | GRM0332C1E821GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1E821JA01# |  |
|        |               |         | 1000pF | ±2%  | GRM0332C1E102GA01# |  |
|        |               |         |        | ±5%  | GRM0332C1E102JA01# |  |

1.0×0.5mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |  |
|--------|---------------|---------|--------|---------|--------------------|--|
| 0.55mm | 100Vdc        | COG     | 0.10pF | ±0.05pF | GRM1555C2AR10WA01# |  |
|        |               |         |        | ±0.05pF | GRM1555C2AR20WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2AR20BA01# |  |
|        |               |         | 0.30pF | ±0.05pF | GRM1555C2AR30WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2AR30BA01# |  |
|        |               |         | 0.40pF | ±0.05pF | GRM1555C2AR40WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2AR40BA01# |  |
|        |               |         | 0.50pF | ±0.05pF | GRM1555C2AR50WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2AR50BA01# |  |
|        |               |         | 0.60pF | ±0.05pF | GRM1555C2AR60WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2AR60BA01# |  |
|        |               |         | 0.70pF | ±0.05pF | GRM1555C2AR70WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2AR70BA01# |  |
|        |               |         | 0.80pF | ±0.05pF | GRM1555C2AR80WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2AR80BA01# |  |
|        |               |         | 0.90pF | ±0.05pF | GRM1555C2AR90WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2AR90BA01# |  |
|        |               |         | 1.0pF  | ±0.05pF | GRM1555C2A1R0WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2A1R0BA01# |  |
|        |               |         |        | ±0.25pF | GRM1555C2A1R0CA01# |  |
|        |               |         | 1.1pF  | ±0.05pF | GRM1555C2A1R1WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2A1R1BA01# |  |
|        |               |         |        | ±0.25pF | GRM1555C2A1R1CA01# |  |
|        |               |         | 1.2pF  | ±0.05pF | GRM1555C2A1R2WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2A1R2BA01# |  |
|        |               |         |        | ±0.25pF | GRM1555C2A1R2CA01# |  |
|        |               |         | 1.3pF  | ±0.05pF | GRM1555C2A1R3WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2A1R3BA01# |  |
|        |               |         |        | ±0.25pF | GRM1555C2A1R3CA01# |  |
|        |               |         | 1.4pF  | ±0.05pF | GRM1555C2A1R4WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2A1R4BA01# |  |
|        |               |         |        | ±0.25pF | GRM1555C2A1R4CA01# |  |
|        |               |         | 1.5pF  | ±0.05pF | GRM1555C2A1R5WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2A1R5BA01# |  |
|        |               |         |        | ±0.25pF | GRM1555C2A1R5CA01# |  |
|        |               |         | 1.6pF  | ±0.05pF | GRM1555C2A1R6WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2A1R6BA01# |  |
|        |               |         |        | ±0.25pF | GRM1555C2A1R6CA01# |  |
|        |               |         | 1.7pF  | ±0.05pF | GRM1555C2A1R7WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2A1R7BA01# |  |
|        |               |         |        | ±0.25pF | GRM1555C2A1R7CA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 100Vdc        | COG     | 1.8pF | ±0.05pF | GRM1555C2A1R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A1R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A1R8CA01# |  |
|        |               |         | 1.9pF | ±0.05pF | GRM1555C2A1R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A1R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A1R9CA01# |  |
|        |               |         | 2.0pF | ±0.05pF | GRM1555C2A2R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A2R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A2R0CA01# |  |
|        |               |         | 2.1pF | ±0.05pF | GRM1555C2A2R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A2R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A2R1CA01# |  |
|        |               |         | 2.2pF | ±0.05pF | GRM1555C2A2R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A2R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A2R2CA01# |  |
|        |               |         | 2.3pF | ±0.05pF | GRM1555C2A2R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A2R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A2R3CA01# |  |
|        |               |         | 2.4pF | ±0.05pF | GRM1555C2A2R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A2R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A2R4CA01# |  |
|        |               |         | 2.5pF | ±0.05pF | GRM1555C2A2R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A2R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A2R5CA01# |  |
|        |               |         | 2.6pF | ±0.05pF | GRM1555C2A2R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A2R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A2R6CA01# |  |
|        |               |         | 2.7pF | ±0.05pF | GRM1555C2A2R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A2R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A2R7CA01# |  |
|        |               |         | 2.8pF | ±0.05pF | GRM1555C2A2R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A2R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A2R8CA01# |  |
|        |               |         | 2.9pF | ±0.05pF | GRM1555C2A2R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A2R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A2R9CA01# |  |
|        |               |         | 3.0pF | ±0.05pF | GRM1555C2A3R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A3R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A3R0CA01# |  |
|        |               |         | 3.1pF | ±0.05pF | GRM1555C2A3R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A3R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A3R1CA01# |  |
|        |               |         | 3.2pF | ±0.05pF | GRM1555C2A3R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A3R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A3R2CA01# |  |
|        |               |         | 3.3pF | ±0.05pF | GRM1555C2A3R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A3R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A3R3CA01# |  |
|        |               |         | 3.4pF | ±0.05pF | GRM1555C2A3R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A3R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A3R4CA01# |  |
|        |               |         | 3.5pF | ±0.05pF | GRM1555C2A3R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A3R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A3R5CA01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 100Vdc        | COG     | 3.6pF | ±0.05pF | GRM1555C2A3R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A3R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A3R6CA01# |  |
|        |               |         | 3.7pF | ±0.05pF | GRM1555C2A3R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A3R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A3R7CA01# |  |
|        |               |         | 3.8pF | ±0.05pF | GRM1555C2A3R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A3R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A3R8CA01# |  |
|        |               |         | 3.9pF | ±0.05pF | GRM1555C2A3R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A3R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A3R9CA01# |  |
|        |               |         | 4.0pF | ±0.05pF | GRM1555C2A4R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A4R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A4R0CA01# |  |
|        |               |         | 4.1pF | ±0.05pF | GRM1555C2A4R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A4R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A4R1CA01# |  |
|        |               |         | 4.2pF | ±0.05pF | GRM1555C2A4R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A4R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A4R2CA01# |  |
|        |               |         | 4.3pF | ±0.05pF | GRM1555C2A4R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A4R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A4R3CA01# |  |
|        |               |         | 4.4pF | ±0.05pF | GRM1555C2A4R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A4R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A4R4CA01# |  |
|        |               |         | 4.5pF | ±0.05pF | GRM1555C2A4R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A4R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A4R5CA01# |  |
|        |               |         | 4.6pF | ±0.05pF | GRM1555C2A4R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A4R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A4R6CA01# |  |
|        |               |         | 4.7pF | ±0.05pF | GRM1555C2A4R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A4R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A4R7CA01# |  |
|        |               |         | 4.8pF | ±0.05pF | GRM1555C2A4R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A4R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A4R8CA01# |  |
|        |               |         | 4.9pF | ±0.05pF | GRM1555C2A4R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A4R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A4R9CA01# |  |
|        |               |         | 5.0pF | ±0.05pF | GRM1555C2A5R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A5R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A5R0CA01# |  |
|        |               |         | 5.1pF | ±0.05pF | GRM1555C2A5R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A5R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A5R1CA01# |  |
|        |               |         | 5.2pF | ±0.05pF | GRM1555C2A5R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A5R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A5R2CA01# |  |
|        |               |         | 5.3pF | ±0.05pF | GRM1555C2A5R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A5R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A5R3CA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 100Vdc        | COG     | 5.3pF | ±0.1pF  | GRM1555C2A5R3BA01# |  | 0.55mm | 100Vdc        | COG     | 6.6pF | ±0.5pF  | GRM1555C2A6R6DA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A5R3CA01# |  |        |               |         |       | ±0.05pF | GRM1555C2A6R7WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1555C2A5R3DA01# |  |        |               |         |       | ±0.1pF  | GRM1555C2A6R7BA01# |  |
|        |               |         | 5.4pF | ±0.05pF | GRM1555C2A5R4WA01# |  |        |               |         |       | ±0.25pF | GRM1555C2A6R7CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A5R4BA01# |  |        |               |         |       | ±0.5pF  | GRM1555C2A6R7DA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A5R4CA01# |  |        |               |         | 6.8pF | ±0.05pF | GRM1555C2A6R8WA01# |  |
|        |               |         | 5.5pF | ±0.05pF | GRM1555C2A5R5WA01# |  |        |               |         |       | ±0.1pF  | GRM1555C2A6R8BA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A5R5BA01# |  |        |               |         |       | ±0.25pF | GRM1555C2A6R8CA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A5R5CA01# |  |        |               |         |       | ±0.5pF  | GRM1555C2A6R8DA01# |  |
|        |               |         | 5.6pF | ±0.05pF | GRM1555C2A5R6WA01# |  |        |               |         | 6.9pF | ±0.05pF | GRM1555C2A6R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A5R6BA01# |  |        |               |         |       | ±0.1pF  | GRM1555C2A6R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A5R6CA01# |  |        |               |         |       | ±0.25pF | GRM1555C2A6R9CA01# |  |
|        |               |         | 5.7pF | ±0.05pF | GRM1555C2A5R7WA01# |  |        |               |         |       | ±0.5pF  | GRM1555C2A6R9DA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A5R7BA01# |  |        |               |         | 7.0pF | ±0.05pF | GRM1555C2A7R0WA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A5R7CA01# |  |        |               |         |       | ±0.1pF  | GRM1555C2A7R0BA01# |  |
|        |               |         | 5.8pF | ±0.05pF | GRM1555C2A5R8WA01# |  |        |               |         |       | ±0.25pF | GRM1555C2A7R0CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A5R8BA01# |  |        |               |         |       | ±0.5pF  | GRM1555C2A7R0DA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A5R8CA01# |  |        |               |         | 7.1pF | ±0.05pF | GRM1555C2A7R1WA01# |  |
|        |               |         | 5.9pF | ±0.05pF | GRM1555C2A5R9WA01# |  |        |               |         |       | ±0.1pF  | GRM1555C2A7R1BA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A5R9BA01# |  |        |               |         |       | ±0.25pF | GRM1555C2A7R1CA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A5R9CA01# |  |        |               |         |       | ±0.5pF  | GRM1555C2A7R1DA01# |  |
|        |               |         | 6.0pF | ±0.05pF | GRM1555C2A6R0WA01# |  |        |               |         | 7.2pF | ±0.05pF | GRM1555C2A7R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A6R0BA01# |  |        |               |         |       | ±0.1pF  | GRM1555C2A7R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A6R0CA01# |  |        |               |         |       | ±0.25pF | GRM1555C2A7R2CA01# |  |
|        |               |         | 6.1pF | ±0.05pF | GRM1555C2A6R1WA01# |  |        |               |         |       | ±0.5pF  | GRM1555C2A7R2DA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A6R1BA01# |  |        |               |         | 7.3pF | ±0.05pF | GRM1555C2A7R3WA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A6R1CA01# |  |        |               |         |       | ±0.1pF  | GRM1555C2A7R3BA01# |  |
|        |               |         | 6.2pF | ±0.05pF | GRM1555C2A6R2WA01# |  |        |               |         |       | ±0.25pF | GRM1555C2A7R3CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A6R2BA01# |  |        |               |         |       | ±0.5pF  | GRM1555C2A7R3DA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A6R2CA01# |  |        |               |         | 7.4pF | ±0.05pF | GRM1555C2A7R4WA01# |  |
|        |               |         | 6.3pF | ±0.05pF | GRM1555C2A6R3WA01# |  |        |               |         |       | ±0.1pF  | GRM1555C2A7R4BA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A6R3BA01# |  |        |               |         |       | ±0.25pF | GRM1555C2A7R4CA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A6R3CA01# |  |        |               |         |       | ±0.5pF  | GRM1555C2A7R4DA01# |  |
|        |               |         | 6.4pF | ±0.05pF | GRM1555C2A6R4WA01# |  |        |               |         | 7.5pF | ±0.05pF | GRM1555C2A7R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A6R4BA01# |  |        |               |         |       | ±0.1pF  | GRM1555C2A7R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A6R4CA01# |  |        |               |         |       | ±0.25pF | GRM1555C2A7R5CA01# |  |
|        |               |         | 6.5pF | ±0.05pF | GRM1555C2A6R5WA01# |  |        |               |         |       | ±0.5pF  | GRM1555C2A7R5DA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A6R5BA01# |  |        |               |         | 7.6pF | ±0.05pF | GRM1555C2A7R6WA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A6R5CA01# |  |        |               |         |       | ±0.1pF  | GRM1555C2A7R6BA01# |  |
|        |               |         | 6.6pF | ±0.05pF | GRM1555C2A6R6WA01# |  |        |               |         |       | ±0.25pF | GRM1555C2A7R6CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A6R6BA01# |  |        |               |         |       | ±0.5pF  | GRM1555C2A7R6DA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A6R6CA01# |  |        |               |         | 7.7pF | ±0.05pF | GRM1555C2A7R7WA01# |  |
|        |               |         | 6.7pF | ±0.05pF | GRM1555C2A6R7WA01# |  |        |               |         |       | ±0.1pF  | GRM1555C2A7R7BA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A6R7BA01# |  |        |               |         |       | ±0.25pF | GRM1555C2A7R7CA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A6R7CA01# |  |        |               |         |       | ±0.5pF  | GRM1555C2A7R7DA01# |  |
|        |               |         | 6.8pF | ±0.05pF | GRM1555C2A6R8WA01# |  |        |               |         | 7.8pF | ±0.05pF | GRM1555C2A7R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A6R8BA01# |  |        |               |         |       | ±0.1pF  | GRM1555C2A7R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A6R8CA01# |  |        |               |         |       | ±0.25pF | GRM1555C2A7R8CA01# |  |
|        |               |         | 6.9pF | ±0.05pF | GRM1555C2A6R9WA01# |  |        |               |         |       | ±0.5pF  | GRM1555C2A7R8DA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A6R9BA01# |  |        |               |         | 7.9pF | ±0.05pF | GRM1555C2A7R9WA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A6R9CA01# |  |        |               |         |       | ±0.1pF  | GRM1555C2A7R9BA01# |  |
|        |               |         | 7.0pF | ±0.05pF | GRM1555C2A7R0WA01# |  |        |               |         |       | ±0.25pF | GRM1555C2A7R9CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A7R0BA01# |  |        |               |         |       | ±0.5pF  | GRM1555C2A7R9DA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A7R0CA01# |  |        |               |         | 8.0pF | ±0.05pF | GRM1555C2A8R0WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1555C2A7R0DA01# |  |        |               |         |       |         |                    |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 100Vdc        | COG     | 8.0pF | ±0.1pF  | GRM1555C2A8R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A8R0CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1555C2A8R0DA01# |  |
|        |               |         | 8.1pF | ±0.05pF | GRM1555C2A8R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A8R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A8R1CA01# |  |
|        |               |         | 8.2pF | ±0.05pF | GRM1555C2A8R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A8R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A8R2CA01# |  |
|        |               |         | 8.3pF | ±0.05pF | GRM1555C2A8R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A8R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A8R3CA01# |  |
|        |               |         | 8.4pF | ±0.05pF | GRM1555C2A8R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A8R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A8R4CA01# |  |
|        |               |         | 8.5pF | ±0.05pF | GRM1555C2A8R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A8R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A8R5CA01# |  |
|        |               |         | 8.6pF | ±0.05pF | GRM1555C2A8R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A8R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A8R6CA01# |  |
|        |               |         | 8.7pF | ±0.05pF | GRM1555C2A8R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A8R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A8R7CA01# |  |
|        |               |         | 8.8pF | ±0.05pF | GRM1555C2A8R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A8R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A8R8CA01# |  |
|        |               |         | 8.9pF | ±0.05pF | GRM1555C2A8R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A8R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A8R9CA01# |  |
|        |               |         | 9.0pF | ±0.05pF | GRM1555C2A9R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A9R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A9R0CA01# |  |
|        |               |         | 9.1pF | ±0.05pF | GRM1555C2A9R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A9R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A9R1CA01# |  |
|        |               |         | 9.2pF | ±0.05pF | GRM1555C2A9R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A9R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A9R2CA01# |  |
|        |               |         | 9.3pF | ±0.05pF | GRM1555C2A9R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1555C2A9R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1555C2A9R3CA01# |  |

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |  |
|--------|---------------|---------|--------|---------|--------------------|--|
| 0.55mm | 100Vdc        | COG     | 9.3pF  | ±0.5pF  | GRM1555C2A9R3DA01# |  |
|        |               |         |        | ±0.05pF | GRM1555C2A9R4WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2A9R4BA01# |  |
|        |               |         | 9.4pF  | ±0.25pF | GRM1555C2A9R4CA01# |  |
|        |               |         |        | ±0.5pF  | GRM1555C2A9R4DA01# |  |
|        |               |         | 9.5pF  | ±0.05pF | GRM1555C2A9R5WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2A9R5BA01# |  |
|        |               |         |        | ±0.25pF | GRM1555C2A9R5CA01# |  |
|        |               |         | 9.6pF  | ±0.05pF | GRM1555C2A9R6WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2A9R6BA01# |  |
|        |               |         |        | ±0.25pF | GRM1555C2A9R6CA01# |  |
|        |               |         | 9.7pF  | ±0.05pF | GRM1555C2A9R7WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2A9R7BA01# |  |
|        |               |         |        | ±0.25pF | GRM1555C2A9R7CA01# |  |
|        |               |         | 9.8pF  | ±0.05pF | GRM1555C2A9R8WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2A9R8BA01# |  |
|        |               |         |        | ±0.25pF | GRM1555C2A9R8CA01# |  |
|        |               |         | 9.9pF  | ±0.05pF | GRM1555C2A9R9WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C2A9R9BA01# |  |
|        |               |         |        | ±0.25pF | GRM1555C2A9R9CA01# |  |
|        |               |         | 10pF   | ±2%     | GRM1555C2A100GA01# |  |
|        |               |         |        | ±5%     | GRM1555C2A100JA01# |  |
|        |               |         | 12pF   | ±2%     | GRM1555C2A120GA01# |  |
|        |               |         |        | ±5%     | GRM1555C2A120JA01# |  |
|        |               |         | 15pF   | ±2%     | GRM1555C2A150GA01# |  |
|        |               |         |        | ±5%     | GRM1555C2A150JA01# |  |
|        |               |         | 18pF   | ±2%     | GRM1555C2A180GA01# |  |
|        |               |         |        | ±5%     | GRM1555C2A180JA01# |  |
|        |               |         | 22pF   | ±2%     | GRM1555C2A220GA01# |  |
|        |               |         |        | ±5%     | GRM1555C2A220JA01# |  |
|        |               |         | 27pF   | ±2%     | GRM1555C2A270GA01# |  |
|        |               |         |        | ±5%     | GRM1555C2A270JA01# |  |
|        |               |         | 33pF   | ±2%     | GRM1555C2A330GA01# |  |
|        |               |         |        | ±5%     | GRM1555C2A330JA01# |  |
|        |               |         | 39pF   | ±2%     | GRM1555C2A390GA01# |  |
|        |               |         |        | ±5%     | GRM1555C2A390JA01# |  |
|        |               |         | 47pF   | ±2%     | GRM1555C2A470GA01# |  |
|        |               |         |        | ±5%     | GRM1555C2A470JA01# |  |
|        |               |         | 56pF   | ±2%     | GRM1555C2A560GA01# |  |
|        |               |         |        | ±5%     | GRM1555C2A560JA01# |  |
|        |               |         | 68pF   | ±2%     | GRM1555C2A680GA01# |  |
|        |               |         |        | ±5%     | GRM1555C2A680JA01# |  |
|        |               |         | 82pF   | ±2%     | GRM1555C2A820GA01# |  |
|        |               |         |        | ±5%     | GRM1555C2A820JA01# |  |
|        |               |         | 100pF  | ±2%     | GRM1555C2A101GA01# |  |
|        |               |         |        | ±5%     | GRM1555C2A101JA01# |  |
|        |               | CK      | 0.10pF | ±0.05pF | GRM1554C2AR10WA01# |  |
|        |               |         | 0.20pF | ±0.05pF | GRM1554C2AR20WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C2AR20BA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|--------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 100Vdc        | CK      | 0.30pF | ±0.05pF | GRM1554C2AR30WA01# |  | 0.55mm | 100Vdc        | CJ      | 2.3pF | ±0.1pF  | GRM1553C2A2R3BA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C2AR30BA01# |  |        |               |         |       | ±0.25pF | GRM1553C2A2R3CA01# |  |
|        |               |         | 0.40pF | ±0.05pF | GRM1554C2AR40WA01# |  |        |               |         | 2.4pF | ±0.05pF | GRM1553C2A2R4WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C2AR40BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C2A2R4BA01# |  |
|        |               |         | 0.50pF | ±0.05pF | GRM1554C2AR50WA01# |  |        |               |         | 2.5pF | ±0.25pF | GRM1553C2A2R4CA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C2AR50BA01# |  |        |               |         |       | ±0.05pF | GRM1553C2A2R5WA01# |  |
|        |               |         | 0.60pF | ±0.05pF | GRM1554C2AR60WA01# |  |        |               |         | 2.6pF | ±0.1pF  | GRM1553C2A2R5BA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C2AR60BA01# |  |        |               |         |       | ±0.25pF | GRM1553C2A2R5CA01# |  |
|        |               |         | 0.70pF | ±0.05pF | GRM1554C2AR70WA01# |  |        |               |         | 2.7pF | ±0.05pF | GRM1553C2A2R6WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C2AR70BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C2A2R6BA01# |  |
|        |               |         | 0.80pF | ±0.05pF | GRM1554C2AR80WA01# |  |        |               |         | 2.8pF | ±0.25pF | GRM1553C2A2R6CA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C2AR80BA01# |  |        |               |         |       | ±0.05pF | GRM1553C2A2R7WA01# |  |
|        |               |         | 0.90pF | ±0.05pF | GRM1554C2AR90WA01# |  |        |               |         | 2.9pF | ±0.1pF  | GRM1553C2A2R7BA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C2AR90BA01# |  |        |               |         |       | ±0.25pF | GRM1553C2A2R7CA01# |  |
|        |               |         | 1.0pF  | ±0.05pF | GRM1554C2A1R0WA01# |  |        |               |         | 3.0pF | ±0.05pF | GRM1553C2A2R8WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C2A1R0BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C2A2R8BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C2A1R0CA01# |  |        |               |         |       | ±0.25pF | GRM1553C2A2R8CA01# |  |
|        |               |         | 1.1pF  | ±0.05pF | GRM1554C2A1R1WA01# |  |        |               |         | 3.1pF | ±0.05pF | GRM1553C2A2R9WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C2A1R1BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C2A2R9BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C2A1R1CA01# |  |        |               |         |       | ±0.25pF | GRM1553C2A2R9CA01# |  |
|        |               |         | 1.2pF  | ±0.05pF | GRM1554C2A1R2WA01# |  |        |               |         | 3.2pF | ±0.05pF | GRM1553C2A3R0WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C2A1R2BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C2A3R0BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C2A1R2CA01# |  |        |               |         |       | ±0.25pF | GRM1553C2A3R0CA01# |  |
|        |               |         | 1.3pF  | ±0.05pF | GRM1554C2A1R3WA01# |  |        |               |         | 3.3pF | ±0.05pF | GRM1553C2A3R1WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C2A1R3BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C2A3R1BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C2A1R3CA01# |  |        |               |         |       | ±0.25pF | GRM1553C2A3R1CA01# |  |
|        |               |         | 1.4pF  | ±0.05pF | GRM1554C2A1R4WA01# |  |        |               |         | 3.4pF | ±0.05pF | GRM1553C2A3R2WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C2A1R4BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C2A3R2BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C2A1R4CA01# |  |        |               |         |       | ±0.25pF | GRM1553C2A3R2CA01# |  |
|        |               |         | 1.5pF  | ±0.05pF | GRM1554C2A1R5WA01# |  |        |               |         | 3.5pF | ±0.05pF | GRM1553C2A3R3WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C2A1R5BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C2A3R3BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C2A1R5CA01# |  |        |               |         |       | ±0.25pF | GRM1553C2A3R3CA01# |  |
|        |               |         | 1.6pF  | ±0.05pF | GRM1554C2A1R6WA01# |  |        |               |         | 3.6pF | ±0.05pF | GRM1553C2A3R4WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C2A1R6BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C2A3R4BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C2A1R6CA01# |  |        |               |         |       | ±0.25pF | GRM1553C2A3R4CA01# |  |
|        |               |         | 1.7pF  | ±0.05pF | GRM1554C2A1R7WA01# |  |        |               |         | 3.7pF | ±0.05pF | GRM1553C2A3R5WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C2A1R7BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C2A3R5BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C2A1R7CA01# |  |        |               |         |       | ±0.25pF | GRM1553C2A3R5CA01# |  |
|        |               |         | 1.8pF  | ±0.05pF | GRM1554C2A1R8WA01# |  |        |               |         | 3.8pF | ±0.05pF | GRM1553C2A3R6WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C2A1R8BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C2A3R6BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C2A1R8CA01# |  |        |               |         |       | ±0.25pF | GRM1553C2A3R6CA01# |  |
|        |               |         | 1.9pF  | ±0.05pF | GRM1554C2A1R9WA01# |  |        |               |         | 3.9pF | ±0.05pF | GRM1553C2A3R7WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C2A1R9BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C2A3R7BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C2A1R9CA01# |  |        |               |         |       | ±0.25pF | GRM1553C2A3R7CA01# |  |
|        |               |         | 2.0pF  | ±0.05pF | GRM1554C2A2R0WA01# |  |        |               |         | 4.0pF | ±0.05pF | GRM1552C2A4R0WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C2A2R0BA01# |  |        |               |         |       | ±0.1pF  | GRM1552C2A4R0BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C2A2R0CA01# |  |        |               |         |       | ±0.25pF | GRM1552C2A4R0CA01# |  |
|        |               | CJ      | 2.1pF  | ±0.05pF | GRM1553C2A2R1WA01# |  |        |               | CH      | 4.1pF | ±0.05pF | GRM1552C2A4R1WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1553C2A2R1BA01# |  |        |               |         |       | ±0.1pF  | GRM1552C2A4R1BA01# |  |
|        |               |         |        | ±0.25pF | GRM1553C2A2R1CA01# |  |        |               |         |       | ±0.25pF | GRM1552C2A4R1CA01# |  |
|        |               |         | 2.2pF  | ±0.05pF | GRM1553C2A2R2WA01# |  |        |               |         |       | ±0.05pF | GRM1552C2A4R2WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1553C2A2R2BA01# |  |        |               |         |       | ±0.1pF  | GRM1552C2A4R2BA01# |  |
|        |               |         |        | ±0.25pF | GRM1553C2A2R2CA01# |  |        |               |         |       | ±0.25pF | GRM1552C2A4R2CA01# |  |
|        |               |         | 2.3pF  | ±0.05pF | GRM1553C2A2R3WA01# |  |        |               |         |       | ±0.05pF | GRM1552C2A4R3WA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 100Vdc        | CH      | 4.1pF | ±0.1pF  | GRM1552C2A4R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A4R1CA01# |  |
|        |               |         | 4.2pF | ±0.05pF | GRM1552C2A4R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A4R2BA01# |  |
|        |               |         | 4.3pF | ±0.05pF | GRM1552C2A4R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A4R3BA01# |  |
|        |               |         | 4.4pF | ±0.05pF | GRM1552C2A4R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A4R4BA01# |  |
|        |               |         | 4.5pF | ±0.05pF | GRM1552C2A4R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A4R5BA01# |  |
|        |               |         | 4.6pF | ±0.05pF | GRM1552C2A4R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A4R6BA01# |  |
|        |               |         | 4.7pF | ±0.05pF | GRM1552C2A4R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A4R7BA01# |  |
|        |               |         | 4.8pF | ±0.05pF | GRM1552C2A4R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A4R8BA01# |  |
|        |               |         | 4.9pF | ±0.05pF | GRM1552C2A4R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A4R9BA01# |  |
|        |               |         | 5.0pF | ±0.05pF | GRM1552C2A5R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A5R0BA01# |  |
|        |               |         | 5.1pF | ±0.05pF | GRM1552C2A5R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A5R1BA01# |  |
|        |               |         | 5.2pF | ±0.05pF | GRM1552C2A5R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A5R2BA01# |  |
|        |               |         | 5.3pF | ±0.05pF | GRM1552C2A5R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A5R3BA01# |  |
|        |               |         | 5.4pF | ±0.05pF | GRM1552C2A5R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A5R4BA01# |  |
|        |               |         | 5.5pF | ±0.05pF | GRM1552C2A5R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A5R5BA01# |  |
|        |               |         | 5.6pF | ±0.05pF | GRM1552C2A5R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A5R6BA01# |  |
|        |               |         | 5.7pF | ±0.05pF | GRM1552C2A5R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A5R7BA01# |  |
|        |               |         | 5.8pF | ±0.05pF | GRM1552C2A5R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A5R8BA01# |  |
|        |               |         | 5.9pF | ±0.05pF | GRM1552C2A5R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A5R9BA01# |  |
|        |               |         | 6.0pF | ±0.05pF | GRM1552C2A6R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R0BA01# |  |
|        |               |         | 6.1pF | ±0.05pF | GRM1552C2A6R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R1BA01# |  |
|        |               |         | 6.2pF | ±0.05pF | GRM1552C2A6R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R2BA01# |  |
|        |               |         | 6.3pF | ±0.05pF | GRM1552C2A6R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R3BA01# |  |
|        |               |         | 6.4pF | ±0.05pF | GRM1552C2A6R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R4BA01# |  |
|        |               |         | 6.5pF | ±0.05pF | GRM1552C2A6R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R5BA01# |  |
|        |               |         | 6.6pF | ±0.05pF | GRM1552C2A6R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R6BA01# |  |
|        |               |         | 6.7pF | ±0.05pF | GRM1552C2A6R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R7BA01# |  |
|        |               |         | 6.8pF | ±0.05pF | GRM1552C2A6R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R8BA01# |  |
|        |               |         | 6.9pF | ±0.05pF | GRM1552C2A6R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R9BA01# |  |
|        |               |         | 7.0pF | ±0.05pF | GRM1552C2A7R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R0BA01# |  |
|        |               |         | 7.1pF | ±0.05pF | GRM1552C2A7R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R1BA01# |  |
|        |               |         | 7.2pF | ±0.05pF | GRM1552C2A7R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R2BA01# |  |
|        |               |         | 7.3pF | ±0.05pF | GRM1552C2A7R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R3BA01# |  |
|        |               |         | 7.4pF | ±0.05pF | GRM1552C2A7R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R4BA01# |  |
|        |               |         | 7.5pF | ±0.05pF | GRM1552C2A7R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R5BA01# |  |
|        |               |         | 7.6pF | ±0.05pF | GRM1552C2A7R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R6BA01# |  |
|        |               |         | 7.7pF | ±0.05pF | GRM1552C2A7R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R7BA01# |  |
|        |               |         | 7.8pF | ±0.05pF | GRM1552C2A7R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R8BA01# |  |
|        |               |         | 7.9pF | ±0.05pF | GRM1552C2A7R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R9BA01# |  |
|        |               |         | 8.0pF | ±0.05pF | GRM1552C2A8R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A8R0BA01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 100Vdc        | CH      | 5.7pF | ±0.1pF  | GRM1552C2A5R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A5R7CA01# |  |
|        |               |         | 5.8pF | ±0.05pF | GRM1552C2A5R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A5R8BA01# |  |
|        |               |         | 5.9pF | ±0.05pF | GRM1552C2A5R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A5R9BA01# |  |
|        |               |         | 6.0pF | ±0.05pF | GRM1552C2A6R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R0BA01# |  |
|        |               |         | 6.1pF | ±0.05pF | GRM1552C2A6R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R1BA01# |  |
|        |               |         | 6.2pF | ±0.05pF | GRM1552C2A6R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R2BA01# |  |
|        |               |         | 6.3pF | ±0.05pF | GRM1552C2A6R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R3BA01# |  |
|        |               |         | 6.4pF | ±0.05pF | GRM1552C2A6R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R4BA01# |  |
|        |               |         | 6.5pF | ±0.05pF | GRM1552C2A6R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R5BA01# |  |
|        |               |         | 6.6pF | ±0.05pF | GRM1552C2A6R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R6BA01# |  |
|        |               |         | 6.7pF | ±0.05pF | GRM1552C2A6R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R7BA01# |  |
|        |               |         | 6.8pF | ±0.05pF | GRM1552C2A6R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R8BA01# |  |
|        |               |         | 6.9pF | ±0.05pF | GRM1552C2A6R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A6R9BA01# |  |
|        |               |         | 7.0pF | ±0.05pF | GRM1552C2A7R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R0BA01# |  |
|        |               |         | 7.1pF | ±0.05pF | GRM1552C2A7R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R1BA01# |  |
|        |               |         | 7.2pF | ±0.05pF | GRM1552C2A7R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R2BA01# |  |
|        |               |         | 7.3pF | ±0.05pF | GRM1552C2A7R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R3BA01# |  |
|        |               |         | 7.4pF | ±0.05pF | GRM1552C2A7R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R4BA01# |  |
|        |               |         | 7.5pF | ±0.05pF | GRM1552C2A7R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R5BA01# |  |
|        |               |         | 7.6pF | ±0.05pF | GRM1552C2A7R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R6BA01# |  |
|        |               |         | 7.7pF | ±0.05pF | GRM1552C2A7R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R7BA01# |  |
|        |               |         | 7.8pF | ±0.05pF | GRM1552C2A7R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R8BA01# |  |
|        |               |         | 7.9pF | ±0.05pF | GRM1552C2A7R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R9BA01# |  |
|        |               |         | 8.0pF | ±0.05pF | GRM1552C2A8R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A8R0BA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 100Vdc        | CH      | 7.0pF | ±0.5pF  | GRM1552C2A7R0DA01# |  |
|        |               |         |       | ±0.05pF | GRM1552C2A7R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A7R1CA01# |  |
|        |               |         | 7.1pF | ±0.5pF  | GRM1552C2A7R1DA01# |  |
|        |               |         |       | ±0.05pF | GRM1552C2A7R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A7R2CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A7R2DA01# |  |
|        |               |         | 7.2pF | ±0.05pF | GRM1552C2A7R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A7R3CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A7R3DA01# |  |
|        |               |         | 7.3pF | ±0.05pF | GRM1552C2A7R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A7R4CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A7R4DA01# |  |
|        |               |         | 7.4pF | ±0.05pF | GRM1552C2A7R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A7R5CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A7R5DA01# |  |
|        |               |         | 7.5pF | ±0.05pF | GRM1552C2A7R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A7R6CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A7R6DA01# |  |
|        |               |         | 7.6pF | ±0.05pF | GRM1552C2A7R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A7R7CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A7R7DA01# |  |
|        |               |         | 7.7pF | ±0.05pF | GRM1552C2A7R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A7R8CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A7R8DA01# |  |
|        |               |         | 7.8pF | ±0.05pF | GRM1552C2A7R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A7R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A7R9CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A7R9DA01# |  |
|        |               |         | 7.9pF | ±0.05pF | GRM1552C2A8R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A8R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A8R0CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A8R0DA01# |  |
|        |               |         | 8.0pF | ±0.05pF | GRM1552C2A8R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A8R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A8R1CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A8R1DA01# |  |
|        |               |         | 8.1pF | ±0.05pF | GRM1552C2A8R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A8R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A8R2CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A8R2DA01# |  |
|        |               |         | 8.2pF | ±0.05pF | GRM1552C2A8R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A8R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A8R3CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A8R3DA01# |  |
|        |               |         | 8.3pF | ±0.05pF | GRM1552C2A8R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A8R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A8R4CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A8R4DA01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 100Vdc        | CH      | 8.4pF | ±0.1pF  | GRM1552C2A8R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A8R4CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A8R4DA01# |  |
|        |               |         | 8.5pF | ±0.05pF | GRM1552C2A8R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A8R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A8R5CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A8R5DA01# |  |
|        |               |         | 8.6pF | ±0.05pF | GRM1552C2A8R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A8R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A8R6CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A8R6DA01# |  |
|        |               |         | 8.7pF | ±0.05pF | GRM1552C2A8R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A8R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A8R7CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A8R7DA01# |  |
|        |               |         | 8.8pF | ±0.05pF | GRM1552C2A8R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A8R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A8R8CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A8R8DA01# |  |
|        |               |         | 8.9pF | ±0.05pF | GRM1552C2A8R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A8R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A8R9CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A8R9DA01# |  |
|        |               |         | 9.0pF | ±0.05pF | GRM1552C2A9R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A9R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A9R0CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A9R0DA01# |  |
|        |               |         | 9.1pF | ±0.05pF | GRM1552C2A9R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A9R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A9R1CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A9R1DA01# |  |
|        |               |         | 9.2pF | ±0.05pF | GRM1552C2A9R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A9R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A9R2CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A9R2DA01# |  |
|        |               |         | 9.3pF | ±0.05pF | GRM1552C2A9R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A9R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A9R3CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A9R3DA01# |  |
|        |               |         | 9.4pF | ±0.05pF | GRM1552C2A9R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A9R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A9R4CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A9R4DA01# |  |
|        |               |         | 9.5pF | ±0.05pF | GRM1552C2A9R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A9R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A9R5CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A9R5DA01# |  |
|        |               |         | 9.6pF | ±0.05pF | GRM1552C2A9R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A9R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A9R6CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A9R6DA01# |  |
|        |               |         | 9.7pF | ±0.05pF | GRM1552C2A9R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C2A9R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C2A9R7CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C2A9R7DA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|--------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 100Vdc        | CH      | 9.7pF  | ±0.5pF  | GRM1552C2A9R7DA01# |  | 0.55mm | 50Vdc         | COG     | 1.0pF | ±0.25pF | GRM1555C1H1R0CA01# |  |
|        |               |         | 9.8pF  | ±0.05pF | GRM1552C2A9R8WA01# |  |        |               |         | 1.1pF | ±0.05pF | GRM1555C1H1R1WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1552C2A9R8BA01# |  |        |               |         |       | ±0.1pF  | GRM1555C1H1R1BA01# |  |
|        |               |         |        | ±0.25pF | GRM1552C2A9R8CA01# |  |        |               |         |       | ±0.25pF | GRM1555C1H1R1CA01# |  |
|        |               |         |        | ±0.5pF  | GRM1552C2A9R8DA01# |  |        |               |         | 1.2pF | ±0.05pF | GRM1555C1H1R2WA01# |  |
|        |               |         | 9.9pF  | ±0.05pF | GRM1552C2A9R9WA01# |  |        |               |         |       | ±0.1pF  | GRM1555C1H1R2BA01# |  |
|        |               |         |        | ±0.1pF  | GRM1552C2A9R9BA01# |  |        |               |         |       | ±0.25pF | GRM1555C1H1R2CA01# |  |
|        |               |         |        | ±0.25pF | GRM1552C2A9R9CA01# |  |        |               |         | 1.3pF | ±0.05pF | GRM1555C1H1R3WA01# |  |
|        |               |         | 10pF   | ±2%     | GRM1552C2A100GA01# |  |        |               |         |       | ±0.1pF  | GRM1555C1H1R3BA01# |  |
|        |               |         |        | ±5%     | GRM1552C2A100JA01# |  |        |               |         |       | ±0.25pF | GRM1555C1H1R3CA01# |  |
|        |               |         | 12pF   | ±2%     | GRM1552C2A120GA01# |  |        |               |         | 1.4pF | ±0.05pF | GRM1555C1H1R4WA01# |  |
|        |               |         |        | ±5%     | GRM1552C2A120JA01# |  |        |               |         |       | ±0.1pF  | GRM1555C1H1R4BA01# |  |
|        |               |         |        |         |                    |  |        |               |         |       | ±0.25pF | GRM1555C1H1R4CA01# |  |
|        |               |         | 15pF   | ±2%     | GRM1552C2A150GA01# |  |        |               |         | 1.5pF | ±0.05pF | GRM1555C1H1R5WA01# |  |
|        |               |         |        | ±5%     | GRM1552C2A150JA01# |  |        |               |         |       | ±0.1pF  | GRM1555C1H1R5BA01# |  |
|        |               |         | 18pF   | ±2%     | GRM1552C2A180GA01# |  |        |               |         |       | ±0.25pF | GRM1555C1H1R5CA01# |  |
|        |               |         |        | ±5%     | GRM1552C2A180JA01# |  |        |               |         | 1.6pF | ±0.05pF | GRM1555C1H1R6WA01# |  |
|        |               |         | 22pF   | ±2%     | GRM1552C2A220GA01# |  |        |               |         |       | ±0.1pF  | GRM1555C1H1R6BA01# |  |
|        |               |         |        | ±5%     | GRM1552C2A220JA01# |  |        |               |         |       | ±0.25pF | GRM1555C1H1R6CA01# |  |
|        |               |         | 27pF   | ±2%     | GRM1552C2A270GA01# |  |        |               |         | 1.7pF | ±0.05pF | GRM1555C1H1R7WA01# |  |
|        |               |         |        | ±5%     | GRM1552C2A270JA01# |  |        |               |         |       | ±0.1pF  | GRM1555C1H1R7BA01# |  |
|        |               |         | 33pF   | ±2%     | GRM1552C2A330GA01# |  |        |               |         |       | ±0.25pF | GRM1555C1H1R7CA01# |  |
|        |               |         |        | ±5%     | GRM1552C2A330JA01# |  |        |               |         | 1.8pF | ±0.05pF | GRM1555C1H1R8WA01# |  |
|        |               |         | 39pF   | ±2%     | GRM1552C2A390GA01# |  |        |               |         |       | ±0.1pF  | GRM1555C1H1R8BA01# |  |
|        |               |         |        | ±5%     | GRM1552C2A390JA01# |  |        |               |         |       | ±0.25pF | GRM1555C1H1R8CA01# |  |
|        |               |         | 47pF   | ±2%     | GRM1552C2A470GA01# |  |        |               |         | 1.9pF | ±0.05pF | GRM1555C1H1R9WA01# |  |
|        |               |         |        | ±5%     | GRM1552C2A470JA01# |  |        |               |         |       | ±0.1pF  | GRM1555C1H1R9BA01# |  |
|        |               |         | 56pF   | ±2%     | GRM1552C2A560GA01# |  |        |               |         |       | ±0.25pF | GRM1555C1H1R9CA01# |  |
|        |               |         |        | ±5%     | GRM1552C2A560JA01# |  |        |               |         | 2.0pF | ±0.05pF | GRM1555C1H2R0WA01# |  |
|        |               |         | 68pF   | ±2%     | GRM1552C2A680GA01# |  |        |               |         |       | ±0.1pF  | GRM1555C1H2R0BA01# |  |
|        |               |         |        | ±5%     | GRM1552C2A680JA01# |  |        |               |         |       | ±0.25pF | GRM1555C1H2R0CA01# |  |
|        |               |         | 82pF   | ±2%     | GRM1552C2A820GA01# |  |        |               |         | 2.1pF | ±0.05pF | GRM1555C1H2R1WA01# |  |
|        |               |         |        | ±5%     | GRM1552C2A820JA01# |  |        |               |         |       | ±0.1pF  | GRM1555C1H2R1BA01# |  |
|        |               |         | 100pF  | ±2%     | GRM1552C2A101GA01# |  |        |               |         |       | ±0.25pF | GRM1555C1H2R1CA01# |  |
|        |               |         |        | ±5%     | GRM1552C2A101JA01# |  |        |               |         | 2.2pF | ±0.05pF | GRM1555C1H2R2WA01# |  |
|        | 50Vdc         | COG     | 0.10pF | ±0.05pF | GRM1555C1HR10WA01# |  |        |               |         |       | ±0.1pF  | GRM1555C1H2R2BA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C1HR20BA01# |  |        |               |         |       | ±0.25pF | GRM1555C1H2R2CA01# |  |
|        |               |         | 0.30pF | ±0.05pF | GRM1555C1HR30WA01# |  |        |               |         | 2.3pF | ±0.05pF | GRM1555C1H2R3WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C1HR30BA01# |  |        |               |         |       | ±0.1pF  | GRM1555C1H2R3BA01# |  |
|        |               |         | 0.40pF | ±0.05pF | GRM1555C1HR40WA01# |  |        |               |         |       | ±0.25pF | GRM1555C1H2R3CA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C1HR40BA01# |  |        |               |         | 2.4pF | ±0.05pF | GRM1555C1H2R4WA01# |  |
|        |               |         | 0.50pF | ±0.05pF | GRM1555C1HR50WA01# |  |        |               |         |       | ±0.1pF  | GRM1555C1H2R4BA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C1HR50BA01# |  |        |               |         |       | ±0.25pF | GRM1555C1H2R4CA01# |  |
|        |               |         | 0.60pF | ±0.05pF | GRM1555C1HR60WA01# |  |        |               |         | 2.5pF | ±0.05pF | GRM1555C1H2R5WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C1HR60BA01# |  |        |               |         |       | ±0.1pF  | GRM1555C1H2R5BA01# |  |
|        |               |         | 0.70pF | ±0.05pF | GRM1555C1HR70WA01# |  |        |               |         |       | ±0.25pF | GRM1555C1H2R5CA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C1HR70BA01# |  |        |               |         | 2.6pF | ±0.05pF | GRM1555C1H2R6WA01# |  |
|        |               |         | 0.80pF | ±0.05pF | GRM1555C1HR80WA01# |  |        |               |         |       | ±0.1pF  | GRM1555C1H2R6BA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C1HR80BA01# |  |        |               |         |       | ±0.25pF | GRM1555C1H2R6CA01# |  |
|        |               |         | 0.90pF | ±0.05pF | GRM1555C1HR90WA01# |  |        |               |         | 2.7pF | ±0.05pF | GRM1555C1H2R7WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C1HR90BA01# |  |        |               |         |       | ±0.1pF  | GRM1555C1H2R7BA01# |  |
|        |               |         | 1.0pF  | ±0.05pF | GRM1555C1H1R0WA01# |  |        |               |         |       | ±0.25pF | GRM1555C1H2R7CA01# |  |
|        |               |         |        | ±0.1pF  | GRM1555C1H1R0BA01# |  |        |               |         | 2.8pF | ±0.05pF | GRM1555C1H2R8WA01# |  |
|        |               |         |        |         |                    |  |        |               |         |       | ±0.1pF  | GRM1555C1H2R8BA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |                    | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |                    |                    |  |
|--------|---------------|---------|-------|---------|--------------------|--------------------|--------|---------------|---------|-------|---------|--------------------|--------------------|--------------------|--|
| 0.55mm | 50Vdc         | COG     | 2.8pF | ±0.25pF | GRM1555C1H2R8CA01# |                    | 0.55mm | 50Vdc         | COG     | 4.6pF | ±0.25pF | GRM1555C1H4R6CA01# |                    |                    |  |
|        |               |         |       | 2.9pF   | ±0.05pF            | GRM1555C1H2R9WA01# |        |               |         |       |         | 4.7pF              | ±0.05pF            | GRM1555C1H4R7WA01# |  |
|        |               |         |       |         | ±0.1pF             | GRM1555C1H2R9BA01# |        |               |         |       |         |                    | ±0.1pF             | GRM1555C1H4R7BA01# |  |
|        |               |         |       |         | ±0.25pF            | GRM1555C1H2R9CA01# |        |               |         |       |         |                    | ±0.25pF            | GRM1555C1H4R7CA01# |  |
|        |               |         | 3.0pF | ±0.05pF | GRM1555C1H3R0WA01# |                    |        |               |         | 4.8pF | ±0.05pF | GRM1555C1H4R8WA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H3R0BA01# |                    |        |               |         |       | ±0.1pF  | GRM1555C1H4R8BA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H3R0CA01# |                    |        |               |         |       | ±0.25pF | GRM1555C1H4R8CA01# |                    |                    |  |
|        |               |         | 3.1pF | ±0.05pF | GRM1555C1H3R1WA01# |                    |        |               |         | 4.9pF | ±0.05pF | GRM1555C1H4R9WA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H3R1BA01# |                    |        |               |         |       | ±0.1pF  | GRM1555C1H4R9BA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H3R1CA01# |                    |        |               |         |       | ±0.25pF | GRM1555C1H4R9CA01# |                    |                    |  |
|        |               |         | 3.2pF | ±0.05pF | GRM1555C1H3R2WA01# |                    |        |               |         | 5.0pF | ±0.05pF | GRM1555C1H5R0WA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H3R2BA01# |                    |        |               |         |       | ±0.1pF  | GRM1555C1H5R0BA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H3R2CA01# |                    |        |               |         |       | ±0.25pF | GRM1555C1H5R0CA01# |                    |                    |  |
|        |               |         | 3.3pF | ±0.05pF | GRM1555C1H3R3WA01# |                    |        |               |         | 5.1pF | ±0.05pF | GRM1555C1H5R1WA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H3R3BA01# |                    |        |               |         |       | ±0.1pF  | GRM1555C1H5R1BA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H3R3CA01# |                    |        |               |         |       | ±0.25pF | GRM1555C1H5R1CA01# |                    |                    |  |
|        |               |         | 3.4pF | ±0.05pF | GRM1555C1H3R4WA01# |                    |        |               |         | 5.2pF | ±0.05pF | GRM1555C1H5R2WA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H3R4BA01# |                    |        |               |         |       | ±0.1pF  | GRM1555C1H5R2BA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H3R4CA01# |                    |        |               |         |       | ±0.25pF | GRM1555C1H5R2CA01# |                    |                    |  |
|        |               |         | 3.5pF | ±0.05pF | GRM1555C1H3R5WA01# |                    |        |               |         | 5.3pF | ±0.05pF | GRM1555C1H5R3WA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H3R5BA01# |                    |        |               |         |       | ±0.1pF  | GRM1555C1H5R3BA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H3R5CA01# |                    |        |               |         |       | ±0.25pF | GRM1555C1H5R3CA01# |                    |                    |  |
|        |               |         | 3.6pF | ±0.05pF | GRM1555C1H3R6WA01# |                    |        |               |         | 5.4pF | ±0.05pF | GRM1555C1H5R4WA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H3R6BA01# |                    |        |               |         |       | ±0.1pF  | GRM1555C1H5R4BA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H3R6CA01# |                    |        |               |         |       | ±0.25pF | GRM1555C1H5R4CA01# |                    |                    |  |
|        |               |         | 3.7pF | ±0.05pF | GRM1555C1H3R7WA01# |                    |        |               |         | 5.5pF | ±0.05pF | GRM1555C1H5R5WA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H3R7BA01# |                    |        |               |         |       | ±0.1pF  | GRM1555C1H5R5BA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H3R7CA01# |                    |        |               |         |       | ±0.25pF | GRM1555C1H5R5CA01# |                    |                    |  |
|        |               |         | 3.8pF | ±0.05pF | GRM1555C1H3R8WA01# |                    |        |               |         | 5.6pF | ±0.05pF | GRM1555C1H5R6WA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H3R8BA01# |                    |        |               |         |       | ±0.1pF  | GRM1555C1H5R6BA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H3R8CA01# |                    |        |               |         |       | ±0.25pF | GRM1555C1H5R6CA01# |                    |                    |  |
|        |               |         | 3.9pF | ±0.05pF | GRM1555C1H3R9WA01# |                    |        |               |         | 5.7pF | ±0.05pF | GRM1555C1H5R7WA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H3R9BA01# |                    |        |               |         |       | ±0.1pF  | GRM1555C1H5R7BA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H3R9CA01# |                    |        |               |         |       | ±0.25pF | GRM1555C1H5R7CA01# |                    |                    |  |
|        |               |         | 4.0pF | ±0.05pF | GRM1555C1H4R0WA01# |                    |        |               |         | 5.8pF | ±0.05pF | GRM1555C1H5R8WA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H4R0BA01# |                    |        |               |         |       | ±0.1pF  | GRM1555C1H5R8BA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H4R0CA01# |                    |        |               |         |       | ±0.25pF | GRM1555C1H5R8CA01# |                    |                    |  |
|        |               |         | 4.1pF | ±0.05pF | GRM1555C1H4R1WA01# |                    |        |               |         | 5.9pF | ±0.05pF | GRM1555C1H5R9WA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H4R1BA01# |                    |        |               |         |       | ±0.1pF  | GRM1555C1H5R9BA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H4R1CA01# |                    |        |               |         |       | ±0.25pF | GRM1555C1H5R9CA01# |                    |                    |  |
|        |               |         | 4.2pF | ±0.05pF | GRM1555C1H4R2WA01# |                    |        |               |         | 6.0pF | ±0.05pF | GRM1555C1H6R0WA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H4R2BA01# |                    |        |               |         |       | ±0.1pF  | GRM1555C1H6R0BA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H4R2CA01# |                    |        |               |         |       | ±0.25pF | GRM1555C1H6R0CA01# |                    |                    |  |
|        |               |         | 4.3pF | ±0.05pF | GRM1555C1H4R3WA01# |                    |        |               |         | 6.1pF | ±0.05pF | GRM1555C1H6R1WA01# |                    |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H4R3BA01# |                    |        |               |         |       | ±0.1pF  | GRM1555C1H6R1BA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H4R3CA01# |                    |        |               |         |       | ±0.25pF | GRM1555C1H6R1CA01# |                    |                    |  |
|        |               |         | 4.4pF | ±0.05pF | GRM1555C1H4R4WA01# |                    |        |               |         |       | 6.2pF   | ±0.05pF            | GRM1555C1H6R2WA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H4R4BA01# |                    |        |               |         |       |         | ±0.1pF             | GRM1555C1H6R2BA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H4R4CA01# |                    |        |               |         |       |         | ±0.25pF            | GRM1555C1H6R2CA01# |                    |  |
|        |               |         | 4.5pF | ±0.05pF | GRM1555C1H4R5WA01# |                    |        |               |         |       | 6.3pF   | ±0.05pF            | GRM1555C1H6R3WA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H4R5BA01# |                    |        |               |         |       |         | ±0.1pF             | GRM1555C1H6R3BA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H4R5CA01# |                    |        |               |         |       |         | ±0.25pF            | GRM1555C1H6R3CA01# |                    |  |
|        |               |         | 4.6pF | ±0.05pF | GRM1555C1H4R6WA01# |                    |        |               |         |       | 6.4pF   | ±0.05pF            | GRM1555C1H6R4WA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H4R6BA01# |                    |        |               |         |       |         | ±0.1pF             | GRM1555C1H6R4BA01# |                    |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.    | Tol.               | Part Number        |                    |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|---------|--------------------|--------------------|--------------------|--|
| 0.55mm | 50Vdc         | COG     | 6.1pF | ±0.1pF  | GRM1555C1H6R1BA01# |  | 0.55mm | 50Vdc         | COG     | 7.4pF   | ±0.5pF             | GRM1555C1H7R4DA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H6R1CA01# |  |        |               |         |         | 7.5pF              | ±0.05pF            | GRM1555C1H7R5WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1555C1H6R1DA01# |  |        |               |         |         |                    | ±0.1pF             | GRM1555C1H7R5BA01# |  |
|        |               |         | 6.2pF | ±0.05pF | GRM1555C1H6R2WA01# |  |        |               |         | ±0.25pF |                    | GRM1555C1H7R5CA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H6R2BA01# |  |        |               |         | ±0.5pF  | GRM1555C1H7R5DA01# |                    |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H6R2CA01# |  |        |               |         | 7.6pF   | ±0.05pF            | GRM1555C1H7R6WA01# |                    |  |
|        |               |         |       | ±0.5pF  | GRM1555C1H6R2DA01# |  |        |               |         |         | ±0.1pF             | GRM1555C1H7R6BA01# |                    |  |
|        |               |         | 6.3pF | ±0.05pF | GRM1555C1H6R3WA01# |  |        |               |         |         | ±0.25pF            | GRM1555C1H7R6CA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H6R3BA01# |  |        |               |         |         | ±0.5pF             | GRM1555C1H7R6DA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H6R3CA01# |  |        |               |         | 7.7pF   | ±0.05pF            | GRM1555C1H7R7WA01# |                    |  |
|        |               |         |       | ±0.5pF  | GRM1555C1H6R3DA01# |  |        |               |         |         | ±0.1pF             | GRM1555C1H7R7BA01# |                    |  |
|        |               |         | 6.4pF | ±0.05pF | GRM1555C1H6R4WA01# |  |        |               |         |         | ±0.25pF            | GRM1555C1H7R7CA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H6R4BA01# |  |        |               |         |         | ±0.5pF             | GRM1555C1H7R7DA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H6R4CA01# |  |        |               |         | 7.8pF   | ±0.05pF            | GRM1555C1H7R8WA01# |                    |  |
|        |               |         |       | ±0.5pF  | GRM1555C1H6R4DA01# |  |        |               |         |         | ±0.1pF             | GRM1555C1H7R8BA01# |                    |  |
|        |               |         | 6.5pF | ±0.05pF | GRM1555C1H6R5WA01# |  |        |               |         |         | ±0.25pF            | GRM1555C1H7R8CA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H6R5BA01# |  |        |               |         |         | ±0.5pF             | GRM1555C1H7R8DA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H6R5CA01# |  |        |               |         | 7.9pF   | ±0.05pF            | GRM1555C1H7R9WA01# |                    |  |
|        |               |         |       | ±0.5pF  | GRM1555C1H6R5DA01# |  |        |               |         |         | ±0.1pF             | GRM1555C1H7R9BA01# |                    |  |
|        |               |         | 6.6pF | ±0.05pF | GRM1555C1H6R6WA01# |  |        |               |         |         | ±0.25pF            | GRM1555C1H7R9CA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H6R6BA01# |  |        |               |         |         | ±0.5pF             | GRM1555C1H7R9DA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H6R6CA01# |  |        |               |         | 8.0pF   | ±0.05pF            | GRM1555C1H8R0WA01# |                    |  |
|        |               |         |       | ±0.5pF  | GRM1555C1H6R6DA01# |  |        |               |         |         | ±0.1pF             | GRM1555C1H8R0BA01# |                    |  |
|        |               |         | 6.7pF | ±0.05pF | GRM1555C1H6R7WA01# |  |        |               |         |         | ±0.25pF            | GRM1555C1H8R0CA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H6R7BA01# |  |        |               |         |         | ±0.5pF             | GRM1555C1H8R0DA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H6R7CA01# |  |        |               |         | 8.1pF   | ±0.05pF            | GRM1555C1H8R1WA01# |                    |  |
|        |               |         |       | ±0.5pF  | GRM1555C1H6R7DA01# |  |        |               |         |         | ±0.1pF             | GRM1555C1H8R1BA01# |                    |  |
|        |               |         | 6.8pF | ±0.05pF | GRM1555C1H6R8WA01# |  |        |               |         |         | ±0.25pF            | GRM1555C1H8R1CA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H6R8BA01# |  |        |               |         |         | ±0.5pF             | GRM1555C1H8R1DA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H6R8CA01# |  |        |               |         | 8.2pF   | ±0.05pF            | GRM1555C1H8R2WA01# |                    |  |
|        |               |         |       | ±0.5pF  | GRM1555C1H6R8DA01# |  |        |               |         |         | ±0.1pF             | GRM1555C1H8R2BA01# |                    |  |
|        |               |         | 6.9pF | ±0.05pF | GRM1555C1H6R9WA01# |  |        |               |         |         | ±0.25pF            | GRM1555C1H8R2CA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H6R9BA01# |  |        |               |         |         | ±0.5pF             | GRM1555C1H8R2DA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H6R9CA01# |  |        |               |         | 8.3pF   | ±0.05pF            | GRM1555C1H8R3WA01# |                    |  |
|        |               |         |       | ±0.5pF  | GRM1555C1H6R9DA01# |  |        |               |         |         | ±0.1pF             | GRM1555C1H8R3BA01# |                    |  |
|        |               |         | 7.0pF | ±0.05pF | GRM1555C1H7R0WA01# |  |        |               |         |         | ±0.25pF            | GRM1555C1H8R3CA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H7R0BA01# |  |        |               |         |         | ±0.5pF             | GRM1555C1H8R3DA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H7R0CA01# |  |        |               |         | 8.4pF   | ±0.05pF            | GRM1555C1H8R4WA01# |                    |  |
|        |               |         |       | ±0.5pF  | GRM1555C1H7R0DA01# |  |        |               |         |         | ±0.1pF             | GRM1555C1H8R4BA01# |                    |  |
|        |               |         | 7.1pF | ±0.05pF | GRM1555C1H7R1WA01# |  |        |               |         |         | ±0.25pF            | GRM1555C1H8R4CA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H7R1BA01# |  |        |               |         |         | ±0.5pF             | GRM1555C1H8R4DA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H7R1CA01# |  |        |               |         | 8.5pF   | ±0.05pF            | GRM1555C1H8R5WA01# |                    |  |
|        |               |         |       | ±0.5pF  | GRM1555C1H7R1DA01# |  |        |               |         |         | ±0.1pF             | GRM1555C1H8R5BA01# |                    |  |
|        |               |         | 7.2pF | ±0.05pF | GRM1555C1H7R2WA01# |  |        |               |         |         | ±0.25pF            | GRM1555C1H8R5CA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H7R2BA01# |  |        |               |         |         | ±0.5pF             | GRM1555C1H8R5DA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H7R2CA01# |  |        |               |         | 8.6pF   | ±0.05pF            | GRM1555C1H8R6WA01# |                    |  |
|        |               |         |       | ±0.5pF  | GRM1555C1H7R2DA01# |  |        |               |         |         | ±0.1pF             | GRM1555C1H8R6BA01# |                    |  |
|        |               |         | 7.3pF | ±0.05pF | GRM1555C1H7R3WA01# |  |        |               |         |         | ±0.25pF            | GRM1555C1H8R6CA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H7R3BA01# |  |        |               |         |         | ±0.5pF             | GRM1555C1H8R6DA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H7R3CA01# |  |        |               |         | 8.7pF   | ±0.05pF            | GRM1555C1H8R7WA01# |                    |  |
|        |               |         |       | ±0.5pF  | GRM1555C1H7R3DA01# |  |        |               |         |         | ±0.1pF             | GRM1555C1H8R7BA01# |                    |  |
|        |               |         | 7.4pF | ±0.05pF | GRM1555C1H7R4WA01# |  |        |               |         |         | ±0.25pF            | GRM1555C1H8R7CA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1555C1H7R4BA01# |  |        |               |         |         | ±0.5pF             | GRM1555C1H8R7DA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1555C1H7R4CA01# |  |        |               |         | ±0.05pF | GRM1555C1H8R8WA01# |                    |                    |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.   | Tol.               | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.   | Tol.   | Part Number        |                    |  |
|--------|---------------|---------|--------|--------------------|--------------------|--|--------|---------------|---------|--------|--------|--------------------|--------------------|--|
| 0.55mm | 50Vdc         | COG     | 8.8pF  | ±0.1pF             | GRM1555C1H8R8BA01# |  | 0.55mm | 50Vdc         | COG     | 18pF   | ±5%    | GRM1555C1H180JA01# |                    |  |
|        |               |         |        | ±0.25pF            | GRM1555C1H8R8CA01# |  |        |               |         | 22pF   | ±2%    | GRM1555C1H220GA01# |                    |  |
|        |               |         |        | ±0.5pF             | GRM1555C1H8R8DA01# |  |        |               |         |        | ±5%    | GRM1555C1H220JA01# |                    |  |
|        |               |         | 8.9pF  | ±0.05pF            | GRM1555C1H8R9WA01# |  |        |               |         | 27pF   | ±2%    | GRM1555C1H270GA01# |                    |  |
|        |               |         |        | ±0.1pF             | GRM1555C1H8R9BA01# |  |        |               |         |        |        | ±5%                | GRM1555C1H270JA01# |  |
|        |               |         |        | ±0.25pF            | GRM1555C1H8R9CA01# |  |        |               |         | 33pF   | ±2%    | GRM1555C1H330GA01# |                    |  |
|        |               |         | ±0.5pF | GRM1555C1H8R9DA01# |                    |  |        |               |         |        | ±5%    | GRM1555C1H330JA01# |                    |  |
|        |               |         | 9.0pF  | ±0.05pF            | GRM1555C1H9R0WA01# |  |        |               |         | 39pF   | ±2%    | GRM1555C1H390GA01# |                    |  |
|        |               |         |        | ±0.1pF             | GRM1555C1H9R0BA01# |  |        |               |         |        |        | ±5%                | GRM1555C1H390JA01# |  |
|        |               |         |        | ±0.25pF            | GRM1555C1H9R0CA01# |  |        |               |         | 47pF   | ±2%    | GRM1555C1H470GA01# |                    |  |
|        |               |         |        | ±0.5pF             | GRM1555C1H9R0DA01# |  |        |               |         |        |        | ±5%                | GRM1555C1H470JA01# |  |
|        |               |         | 9.1pF  | ±0.05pF            | GRM1555C1H9R1WA01# |  |        |               |         | 56pF   | ±2%    | GRM1555C1H560GA01# |                    |  |
|        |               |         |        | ±0.1pF             | GRM1555C1H9R1BA01# |  |        |               |         |        |        | ±5%                | GRM1555C1H560JA01# |  |
|        |               |         |        | ±0.25pF            | GRM1555C1H9R1CA01# |  |        |               |         | 68pF   | ±2%    | GRM1555C1H680GA01# |                    |  |
|        |               |         |        | ±0.5pF             | GRM1555C1H9R1DA01# |  |        |               |         |        |        | ±5%                | GRM1555C1H680JA01# |  |
|        |               |         | 9.2pF  | ±0.05pF            | GRM1555C1H9R2WA01# |  |        |               |         | 82pF   | ±2%    | GRM1555C1H820GA01# |                    |  |
|        |               |         |        | ±0.1pF             | GRM1555C1H9R2BA01# |  |        |               |         |        |        | ±5%                | GRM1555C1H820JA01# |  |
|        |               |         |        | ±0.25pF            | GRM1555C1H9R2CA01# |  |        |               |         | 100pF  | ±2%    | GRM1555C1H101GA01# |                    |  |
|        |               |         |        | ±0.5pF             | GRM1555C1H9R2DA01# |  |        |               |         |        |        | ±5%                | GRM1555C1H101JA01# |  |
|        |               |         | 9.3pF  | ±0.05pF            | GRM1555C1H9R3WA01# |  |        |               |         | 120pF  | ±2%    | GRM1555C1H121GA01# |                    |  |
|        |               |         |        | ±0.1pF             | GRM1555C1H9R3BA01# |  |        |               |         |        |        | ±5%                | GRM1555C1H121JA01# |  |
|        |               |         |        | ±0.25pF            | GRM1555C1H9R3CA01# |  |        |               |         | 150pF  | ±2%    | GRM1555C1H151GA01# |                    |  |
|        |               |         |        | ±0.5pF             | GRM1555C1H9R3DA01# |  |        |               |         |        |        | ±5%                | GRM1555C1H151JA01# |  |
|        |               |         | 9.4pF  | ±0.05pF            | GRM1555C1H9R4WA01# |  |        |               |         | 180pF  | ±2%    | GRM1555C1H181GA01# |                    |  |
|        |               |         |        | ±0.1pF             | GRM1555C1H9R4BA01# |  |        |               |         |        |        | ±5%                | GRM1555C1H181JA01# |  |
|        |               |         |        | ±0.25pF            | GRM1555C1H9R4CA01# |  |        |               |         | 220pF  | ±2%    | GRM1555C1H221GA01# |                    |  |
|        |               |         |        | ±0.5pF             | GRM1555C1H9R4DA01# |  |        |               |         |        |        | ±5%                | GRM1555C1H221JA01# |  |
|        |               |         | 9.5pF  | ±0.05pF            | GRM1555C1H9R5WA01# |  |        |               |         | 270pF  | ±2%    | GRM1555C1H271GA01# |                    |  |
|        |               |         |        | ±0.1pF             | GRM1555C1H9R5BA01# |  |        |               |         |        |        | ±5%                | GRM1555C1H271JA01# |  |
|        |               |         |        | ±0.25pF            | GRM1555C1H9R5CA01# |  |        |               |         | 330pF  | ±2%    | GRM1555C1H331GA01# |                    |  |
|        |               |         |        | ±0.5pF             | GRM1555C1H9R5DA01# |  |        |               |         |        |        | ±5%                | GRM1555C1H331JA01# |  |
|        |               |         | 9.6pF  | ±0.05pF            | GRM1555C1H9R6WA01# |  |        |               |         | 390pF  | ±2%    | GRM1555C1H391GA01# |                    |  |
|        |               |         |        | ±0.1pF             | GRM1555C1H9R6BA01# |  |        |               |         |        |        | ±5%                | GRM1555C1H391JA01# |  |
|        |               |         |        | ±0.25pF            | GRM1555C1H9R6CA01# |  |        |               |         | 470pF  | ±2%    | GRM1555C1H471GA01# |                    |  |
|        |               |         |        | ±0.5pF             | GRM1555C1H9R6DA01# |  |        |               |         |        |        | ±5%                | GRM1555C1H471JA01# |  |
|        |               |         | 9.7pF  | ±0.05pF            | GRM1555C1H9R7WA01# |  |        |               |         | 560pF  | ±2%    | GRM1555C1H561GA01# |                    |  |
|        |               |         |        | ±0.1pF             | GRM1555C1H9R7BA01# |  |        |               |         |        |        | ±5%                | GRM1555C1H561JA01# |  |
|        |               |         |        | ±0.25pF            | GRM1555C1H9R7CA01# |  |        |               |         | 680pF  | ±2%    | GRM1555C1H681GA01# |                    |  |
|        |               |         |        | ±0.5pF             | GRM1555C1H9R7DA01# |  |        |               |         |        |        | ±5%                | GRM1555C1H681JA01# |  |
|        |               |         | 9.8pF  | ±0.05pF            | GRM1555C1H9R8WA01# |  |        |               |         | 820pF  | ±2%    | GRM1555C1H821GA01# |                    |  |
|        |               |         |        | ±0.1pF             | GRM1555C1H9R8BA01# |  |        |               |         |        |        | ±5%                | GRM1555C1H821JA01# |  |
|        |               |         |        | ±0.25pF            | GRM1555C1H9R8CA01# |  |        |               |         | 1000pF | ±2%    | GRM1555C1H102GA01# |                    |  |
|        |               |         |        | ±0.5pF             | GRM1555C1H9R8DA01# |  |        |               |         |        |        | ±5%                | GRM1555C1H102JA01# |  |
|        |               |         | 9.9pF  | ±0.05pF            | GRM1555C1H9R9WA01# |  |        |               |         | CK     | 0.10pF | ±0.05pF            | GRM1554C1HR10WA01# |  |
|        |               |         |        | ±0.1pF             | GRM1555C1H9R9BA01# |  |        |               |         |        | 0.20pF | ±0.05pF            | GRM1554C1HR20WA01# |  |
|        |               |         |        | ±0.25pF            | GRM1555C1H9R9CA01# |  |        |               |         |        |        | ±0.1pF             | GRM1554C1HR20BA01# |  |
|        |               |         |        | ±0.5pF             | GRM1555C1H9R9DA01# |  |        |               |         |        | 0.30pF | ±0.05pF            | GRM1554C1HR30WA01# |  |
|        |               |         | 10pF   | ±2%                | GRM1555C1H100GA01# |  |        |               |         |        |        | ±0.1pF             | GRM1554C1HR30BA01# |  |
|        |               |         |        | ±5%                | GRM1555C1H100JA01# |  |        |               |         |        | 0.40pF | ±0.05pF            | GRM1554C1HR40WA01# |  |
|        |               |         | 12pF   | ±2%                | GRM1555C1H120GA01# |  |        |               |         |        |        | ±0.1pF             | GRM1554C1HR40BA01# |  |
|        |               |         |        | ±5%                | GRM1555C1H120JA01# |  |        |               |         |        | 0.50pF | ±0.05pF            | GRM1554C1HR50WA01# |  |
|        |               |         | 15pF   | ±2%                | GRM1555C1H150GA01# |  |        |               |         |        |        | ±0.1pF             | GRM1554C1HR50BA01# |  |
|        |               |         |        | ±5%                | GRM1555C1H150JA01# |  |        |               |         |        | 0.60pF | ±0.05pF            | GRM1554C1HR60WA01# |  |
|        |               |         | 18pF   | ±2%                | GRM1555C1H180GA01# |  |        |               |         |        |        | ±0.1pF             | GRM1554C1HR60BA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|--------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 50Vdc         | CK      | 0.70pF | ±0.05pF | GRM1554C1HR70WA01# |  | 0.55mm | 50Vdc         | CJ      | 2.6pF | ±0.05pF | GRM1553C1H2R6WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C1HR70BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C1H2R6BA01# |  |
|        |               |         | 0.80pF | ±0.05pF | GRM1554C1HR80WA01# |  |        |               |         |       | ±0.25pF | GRM1553C1H2R6CA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C1HR80BA01# |  |        |               |         | 2.7pF | ±0.05pF | GRM1553C1H2R7WA01# |  |
|        |               |         | 0.90pF | ±0.05pF | GRM1554C1HR90WA01# |  |        |               |         |       | ±0.1pF  | GRM1553C1H2R7BA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C1HR90BA01# |  |        |               |         |       | ±0.25pF | GRM1553C1H2R7CA01# |  |
|        |               |         | 1.0pF  | ±0.05pF | GRM1554C1H1R0WA01# |  |        |               |         | 2.8pF | ±0.05pF | GRM1553C1H2R8WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C1H1R0BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C1H2R8BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C1H1R0CA01# |  |        |               |         |       | ±0.25pF | GRM1553C1H2R8CA01# |  |
|        |               |         | 1.1pF  | ±0.05pF | GRM1554C1H1R1WA01# |  |        |               |         | 2.9pF | ±0.05pF | GRM1553C1H2R9WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C1H1R1BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C1H2R9BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C1H1R1CA01# |  |        |               |         |       | ±0.25pF | GRM1553C1H2R9CA01# |  |
|        |               |         | 1.2pF  | ±0.05pF | GRM1554C1H1R2WA01# |  |        |               |         | 3.0pF | ±0.05pF | GRM1553C1H3R0WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C1H1R2BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C1H3R0BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C1H1R2CA01# |  |        |               |         |       | ±0.25pF | GRM1553C1H3R0CA01# |  |
|        |               |         | 1.3pF  | ±0.05pF | GRM1554C1H1R3WA01# |  |        |               |         | 3.1pF | ±0.05pF | GRM1553C1H3R1WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C1H1R3BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C1H3R1BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C1H1R3CA01# |  |        |               |         |       | ±0.25pF | GRM1553C1H3R1CA01# |  |
|        |               |         | 1.4pF  | ±0.05pF | GRM1554C1H1R4WA01# |  |        |               |         | 3.2pF | ±0.05pF | GRM1553C1H3R2WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C1H1R4BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C1H3R2BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C1H1R4CA01# |  |        |               |         |       | ±0.25pF | GRM1553C1H3R2CA01# |  |
|        |               |         | 1.5pF  | ±0.05pF | GRM1554C1H1R5WA01# |  |        |               |         | 3.3pF | ±0.05pF | GRM1553C1H3R3WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C1H1R5BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C1H3R3BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C1H1R5CA01# |  |        |               |         |       | ±0.25pF | GRM1553C1H3R3CA01# |  |
|        |               |         | 1.6pF  | ±0.05pF | GRM1554C1H1R6WA01# |  |        |               |         | 3.4pF | ±0.05pF | GRM1553C1H3R4WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C1H1R6BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C1H3R4BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C1H1R6CA01# |  |        |               |         |       | ±0.25pF | GRM1553C1H3R4CA01# |  |
|        |               |         | 1.7pF  | ±0.05pF | GRM1554C1H1R7WA01# |  |        |               |         | 3.5pF | ±0.05pF | GRM1553C1H3R5WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C1H1R7BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C1H3R5BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C1H1R7CA01# |  |        |               |         |       | ±0.25pF | GRM1553C1H3R5CA01# |  |
|        |               |         | 1.8pF  | ±0.05pF | GRM1554C1H1R8WA01# |  |        |               |         | 3.6pF | ±0.05pF | GRM1553C1H3R6WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C1H1R8BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C1H3R6BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C1H1R8CA01# |  |        |               |         |       | ±0.25pF | GRM1553C1H3R6CA01# |  |
|        |               |         | 1.9pF  | ±0.05pF | GRM1554C1H1R9WA01# |  |        |               |         | 3.7pF | ±0.05pF | GRM1553C1H3R7WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C1H1R9BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C1H3R7BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C1H1R9CA01# |  |        |               |         |       | ±0.25pF | GRM1553C1H3R7CA01# |  |
|        |               |         | 2.0pF  | ±0.05pF | GRM1554C1H2R0WA01# |  |        |               |         | 3.8pF | ±0.05pF | GRM1553C1H3R8WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1554C1H2R0BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C1H3R8BA01# |  |
|        |               |         |        | ±0.25pF | GRM1554C1H2R0CA01# |  |        |               |         |       | ±0.25pF | GRM1553C1H3R8CA01# |  |
|        |               | CJ      | 2.1pF  | ±0.05pF | GRM1553C1H2R1WA01# |  |        |               |         | 3.9pF | ±0.05pF | GRM1553C1H3R9WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1553C1H2R1BA01# |  |        |               |         |       | ±0.1pF  | GRM1553C1H3R9BA01# |  |
|        |               |         |        | ±0.25pF | GRM1553C1H2R1CA01# |  |        |               |         |       | ±0.25pF | GRM1553C1H3R9CA01# |  |
|        |               |         | 2.2pF  | ±0.05pF | GRM1553C1H2R2WA01# |  |        |               | CH      | 4.0pF | ±0.05pF | GRM1552C1H4R0WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1553C1H2R2BA01# |  |        |               |         |       | ±0.1pF  | GRM1552C1H4R0BA01# |  |
|        |               |         |        | ±0.25pF | GRM1553C1H2R2CA01# |  |        |               |         |       | ±0.25pF | GRM1552C1H4R0CA01# |  |
|        |               |         | 2.3pF  | ±0.05pF | GRM1553C1H2R3WA01# |  |        |               |         | 4.1pF | ±0.05pF | GRM1552C1H4R1WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1553C1H2R3BA01# |  |        |               |         |       | ±0.1pF  | GRM1552C1H4R1BA01# |  |
|        |               |         |        | ±0.25pF | GRM1553C1H2R3CA01# |  |        |               |         |       | ±0.25pF | GRM1552C1H4R1CA01# |  |
|        |               |         | 2.4pF  | ±0.05pF | GRM1553C1H2R4WA01# |  |        |               |         | 4.2pF | ±0.05pF | GRM1552C1H4R2WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1553C1H2R4BA01# |  |        |               |         |       | ±0.1pF  | GRM1552C1H4R2BA01# |  |
|        |               |         |        | ±0.25pF | GRM1553C1H2R4CA01# |  |        |               |         |       | ±0.25pF | GRM1552C1H4R2CA01# |  |
|        |               |         | 2.5pF  | ±0.05pF | GRM1553C1H2R5WA01# |  |        |               |         | 4.3pF | ±0.05pF | GRM1552C1H4R3WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1553C1H2R5BA01# |  |        |               |         |       | ±0.1pF  | GRM1552C1H4R3BA01# |  |
|        |               |         |        | ±0.25pF | GRM1553C1H2R5CA01# |  |        |               |         |       | ±0.25pF | GRM1552C1H4R3CA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 50Vdc         | CH      | 4.4pF | ±0.05pF | GRM1552C1H4R4WA01# |  | 0.55mm | 50Vdc         | CH      | 5.9pF | ±0.1pF  | GRM1552C1H5R9BA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H4R4BA01# |  |        |               |         |       | ±0.25pF | GRM1552C1H5R9CA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H4R4CA01# |  |        |               |         |       | ±0.5pF  | GRM1552C1H5R9DA01# |  |
|        |               |         | 4.5pF | ±0.05pF | GRM1552C1H4R5WA01# |  |        |               |         | 6.0pF | ±0.05pF | GRM1552C1H6R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H4R5BA01# |  |        |               |         |       | ±0.1pF  | GRM1552C1H6R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H4R5CA01# |  |        |               |         |       | ±0.25pF | GRM1552C1H6R0CA01# |  |
|        |               |         | 4.6pF | ±0.05pF | GRM1552C1H4R6WA01# |  |        |               |         |       | ±0.5pF  | GRM1552C1H6R0DA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H4R6BA01# |  |        |               |         | 6.1pF | ±0.05pF | GRM1552C1H6R1WA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H4R6CA01# |  |        |               |         |       | ±0.1pF  | GRM1552C1H6R1BA01# |  |
|        |               |         | 4.7pF | ±0.05pF | GRM1552C1H4R7WA01# |  |        |               |         |       | ±0.25pF | GRM1552C1H6R1CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H4R7BA01# |  |        |               |         |       | ±0.5pF  | GRM1552C1H6R1DA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H4R7CA01# |  |        |               |         | 6.2pF | ±0.05pF | GRM1552C1H6R2WA01# |  |
|        |               |         | 4.8pF | ±0.05pF | GRM1552C1H4R8WA01# |  |        |               |         |       | ±0.1pF  | GRM1552C1H6R2BA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H4R8BA01# |  |        |               |         |       | ±0.25pF | GRM1552C1H6R2CA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H4R8CA01# |  |        |               |         |       | ±0.5pF  | GRM1552C1H6R2DA01# |  |
|        |               |         | 4.9pF | ±0.05pF | GRM1552C1H4R9WA01# |  |        |               |         | 6.3pF | ±0.05pF | GRM1552C1H6R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H4R9BA01# |  |        |               |         |       | ±0.1pF  | GRM1552C1H6R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H4R9CA01# |  |        |               |         |       | ±0.25pF | GRM1552C1H6R3CA01# |  |
|        |               |         | 5.0pF | ±0.05pF | GRM1552C1H5R0WA01# |  |        |               |         |       | ±0.5pF  | GRM1552C1H6R3DA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H5R0BA01# |  |        |               |         | 6.4pF | ±0.05pF | GRM1552C1H6R4WA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H5R0CA01# |  |        |               |         |       | ±0.1pF  | GRM1552C1H6R4BA01# |  |
|        |               |         | 5.1pF | ±0.05pF | GRM1552C1H5R1WA01# |  |        |               |         |       | ±0.25pF | GRM1552C1H6R4CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H5R1BA01# |  |        |               |         |       | ±0.5pF  | GRM1552C1H6R4DA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H5R1CA01# |  |        |               |         | 6.5pF | ±0.05pF | GRM1552C1H6R5WA01# |  |
|        |               |         | 5.2pF | ±0.05pF | GRM1552C1H5R2WA01# |  |        |               |         |       | ±0.1pF  | GRM1552C1H6R5BA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H5R2BA01# |  |        |               |         |       | ±0.25pF | GRM1552C1H6R5CA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H5R2CA01# |  |        |               |         |       | ±0.5pF  | GRM1552C1H6R5DA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H5R2DA01# |  |        |               |         | 6.6pF | ±0.05pF | GRM1552C1H6R6WA01# |  |
|        |               |         | 5.3pF | ±0.05pF | GRM1552C1H5R3WA01# |  |        |               |         |       | ±0.1pF  | GRM1552C1H6R6BA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H5R3BA01# |  |        |               |         |       | ±0.25pF | GRM1552C1H6R6CA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H5R3CA01# |  |        |               |         |       | ±0.5pF  | GRM1552C1H6R6DA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H5R3DA01# |  |        |               |         | 6.7pF | ±0.05pF | GRM1552C1H6R7WA01# |  |
|        |               |         | 5.4pF | ±0.05pF | GRM1552C1H5R4WA01# |  |        |               |         |       | ±0.1pF  | GRM1552C1H6R7BA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H5R4BA01# |  |        |               |         |       | ±0.25pF | GRM1552C1H6R7CA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H5R4CA01# |  |        |               |         |       | ±0.5pF  | GRM1552C1H6R7DA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H5R4DA01# |  |        |               |         | 6.8pF | ±0.05pF | GRM1552C1H6R8WA01# |  |
|        |               |         | 5.5pF | ±0.05pF | GRM1552C1H5R5WA01# |  |        |               |         |       | ±0.1pF  | GRM1552C1H6R8BA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H5R5BA01# |  |        |               |         |       | ±0.25pF | GRM1552C1H6R8CA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H5R5CA01# |  |        |               |         |       | ±0.5pF  | GRM1552C1H6R8DA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H5R5DA01# |  |        |               |         | 6.9pF | ±0.05pF | GRM1552C1H6R9WA01# |  |
|        |               |         | 5.6pF | ±0.05pF | GRM1552C1H5R6WA01# |  |        |               |         |       | ±0.1pF  | GRM1552C1H6R9BA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H5R6BA01# |  |        |               |         |       | ±0.25pF | GRM1552C1H6R9CA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H5R6CA01# |  |        |               |         |       | ±0.5pF  | GRM1552C1H6R9DA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H5R6DA01# |  |        |               |         | 7.0pF | ±0.05pF | GRM1552C1H7R0WA01# |  |
|        |               |         | 5.7pF | ±0.05pF | GRM1552C1H5R7WA01# |  |        |               |         |       | ±0.1pF  | GRM1552C1H7R0BA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H5R7BA01# |  |        |               |         |       | ±0.25pF | GRM1552C1H7R0CA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H5R7CA01# |  |        |               |         |       | ±0.5pF  | GRM1552C1H7R0DA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H5R7DA01# |  |        |               |         | 7.1pF | ±0.05pF | GRM1552C1H7R1WA01# |  |
|        |               |         | 5.8pF | ±0.05pF | GRM1552C1H5R8WA01# |  |        |               |         |       | ±0.1pF  | GRM1552C1H7R1BA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H5R8BA01# |  |        |               |         |       | ±0.25pF | GRM1552C1H7R1CA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H5R8CA01# |  |        |               |         |       | ±0.5pF  | GRM1552C1H7R1DA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H5R8DA01# |  |        |               |         | 7.2pF | ±0.05pF | GRM1552C1H7R2WA01# |  |
|        |               |         | 5.9pF | ±0.05pF | GRM1552C1H5R9WA01# |  |        |               |         |       | ±0.1pF  | GRM1552C1H7R2BA01# |  |
|        |               |         |       |         |                    |  |        |               |         |       | ±0.25pF | GRM1552C1H7R2CA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 50Vdc         | CH      | 7.2pF | ±0.5pF  | GRM1552C1H7R2DA01# |  |
|        |               |         |       | ±0.05pF | GRM1552C1H7R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H7R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H7R3CA01# |  |
|        |               |         | 7.3pF | ±0.5pF  | GRM1552C1H7R3DA01# |  |
|        |               |         |       | ±0.05pF | GRM1552C1H7R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H7R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H7R4CA01# |  |
|        |               |         | 7.4pF | ±0.5pF  | GRM1552C1H7R4DA01# |  |
|        |               |         |       | ±0.05pF | GRM1552C1H7R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H7R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H7R5CA01# |  |
|        |               |         | 7.5pF | ±0.5pF  | GRM1552C1H7R5DA01# |  |
|        |               |         |       | ±0.05pF | GRM1552C1H7R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H7R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H7R6CA01# |  |
|        |               |         | 7.6pF | ±0.5pF  | GRM1552C1H7R6DA01# |  |
|        |               |         |       | ±0.05pF | GRM1552C1H7R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H7R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H7R7CA01# |  |
|        |               |         | 7.7pF | ±0.5pF  | GRM1552C1H7R7DA01# |  |
|        |               |         |       | ±0.05pF | GRM1552C1H7R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H7R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H7R8CA01# |  |
|        |               |         | 7.8pF | ±0.5pF  | GRM1552C1H7R8DA01# |  |
|        |               |         |       | ±0.05pF | GRM1552C1H7R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H7R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H7R9CA01# |  |
|        |               |         | 7.9pF | ±0.5pF  | GRM1552C1H7R9DA01# |  |
|        |               |         |       | ±0.05pF | GRM1552C1H8R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H8R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H8R0CA01# |  |
|        |               |         | 8.0pF | ±0.5pF  | GRM1552C1H8R0DA01# |  |
|        |               |         |       | ±0.05pF | GRM1552C1H8R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H8R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H8R1CA01# |  |
|        |               |         | 8.1pF | ±0.5pF  | GRM1552C1H8R1DA01# |  |
|        |               |         |       | ±0.05pF | GRM1552C1H8R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H8R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H8R2CA01# |  |
|        |               |         | 8.2pF | ±0.5pF  | GRM1552C1H8R2DA01# |  |
|        |               |         |       | ±0.05pF | GRM1552C1H8R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H8R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H8R3CA01# |  |
|        |               |         | 8.3pF | ±0.5pF  | GRM1552C1H8R3DA01# |  |
|        |               |         |       | ±0.05pF | GRM1552C1H8R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H8R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H8R4CA01# |  |
|        |               |         | 8.4pF | ±0.5pF  | GRM1552C1H8R4DA01# |  |
|        |               |         |       | ±0.05pF | GRM1552C1H8R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H8R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H8R5CA01# |  |
|        |               |         | 8.5pF | ±0.5pF  | GRM1552C1H8R5DA01# |  |
|        |               |         |       | ±0.05pF | GRM1552C1H8R6WA01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 50Vdc         | CH      | 8.6pF | ±0.1pF  | GRM1552C1H8R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H8R6CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H8R6DA01# |  |
|        |               |         | 8.7pF | ±0.05pF | GRM1552C1H8R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H8R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H8R7CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H8R7DA01# |  |
|        |               |         | 8.8pF | ±0.05pF | GRM1552C1H8R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H8R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H8R8CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H8R8DA01# |  |
|        |               |         | 8.9pF | ±0.05pF | GRM1552C1H8R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H8R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H8R9CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H8R9DA01# |  |
|        |               |         | 9.0pF | ±0.05pF | GRM1552C1H9R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H9R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H9R0CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H9R0DA01# |  |
|        |               |         | 9.1pF | ±0.05pF | GRM1552C1H9R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H9R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H9R1CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H9R1DA01# |  |
|        |               |         | 9.2pF | ±0.05pF | GRM1552C1H9R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H9R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H9R2CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H9R2DA01# |  |
|        |               |         | 9.3pF | ±0.05pF | GRM1552C1H9R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H9R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H9R3CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H9R3DA01# |  |
|        |               |         | 9.4pF | ±0.05pF | GRM1552C1H9R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H9R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H9R4CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H9R4DA01# |  |
|        |               |         | 9.5pF | ±0.05pF | GRM1552C1H9R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H9R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H9R5CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H9R5DA01# |  |
|        |               |         | 9.6pF | ±0.05pF | GRM1552C1H9R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H9R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H9R6CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H9R6DA01# |  |
|        |               |         | 9.7pF | ±0.05pF | GRM1552C1H9R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H9R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H9R7CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H9R7DA01# |  |
|        |               |         | 9.8pF | ±0.05pF | GRM1552C1H9R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H9R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H9R8CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1552C1H9R8DA01# |  |
|        |               |         | 9.9pF | ±0.05pF | GRM1552C1H9R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1552C1H9R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM1552C1H9R9CA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.   | Tol.   | Part Number        |  |
|--------|---------------|---------|--------|--------|--------------------|--|
| 0.55mm | 50Vdc         | CH      | 9.9pF  | ±0.5pF | GRM1552C1H9R9DA01# |  |
|        |               |         | 10pF   | ±2%    | GRM1552C1H100GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H100JA01# |  |
|        |               |         | 12pF   | ±2%    | GRM1552C1H120GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H120JA01# |  |
|        |               |         | 15pF   | ±2%    | GRM1552C1H150GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H150JA01# |  |
|        |               |         | 18pF   | ±2%    | GRM1552C1H180GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H180JA01# |  |
|        |               |         | 22pF   | ±2%    | GRM1552C1H220GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H220JA01# |  |
|        |               |         | 27pF   | ±2%    | GRM1552C1H270GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H270JA01# |  |
|        |               |         | 33pF   | ±2%    | GRM1552C1H330GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H330JA01# |  |
|        |               |         | 39pF   | ±2%    | GRM1552C1H390GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H390JA01# |  |
|        |               |         | 47pF   | ±2%    | GRM1552C1H470GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H470JA01# |  |
|        |               |         | 56pF   | ±2%    | GRM1552C1H560GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H560JA01# |  |
|        |               |         | 68pF   | ±2%    | GRM1552C1H680GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H680JA01# |  |
|        |               |         | 82pF   | ±2%    | GRM1552C1H820GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H820JA01# |  |
|        |               |         | 100pF  | ±2%    | GRM1552C1H101GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H101JA01# |  |
|        |               |         | 120pF  | ±2%    | GRM1552C1H121GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H121JA01# |  |
|        |               |         | 150pF  | ±2%    | GRM1552C1H151GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H151JA01# |  |
|        |               |         | 180pF  | ±2%    | GRM1552C1H181GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H181JA01# |  |
|        |               |         | 220pF  | ±2%    | GRM1552C1H221GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H221JA01# |  |
|        |               |         | 270pF  | ±2%    | GRM1552C1H271GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H271JA01# |  |
|        |               |         | 330pF  | ±2%    | GRM1552C1H331GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H331JA01# |  |
|        |               |         | 390pF  | ±2%    | GRM1552C1H391GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H391JA01# |  |
|        |               |         | 470pF  | ±2%    | GRM1552C1H471GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H471JA01# |  |
|        |               |         | 560pF  | ±2%    | GRM1552C1H561GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H561JA01# |  |
|        |               |         | 680pF  | ±2%    | GRM1552C1H681GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H681JA01# |  |
|        |               |         | 820pF  | ±2%    | GRM1552C1H821GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H821JA01# |  |
|        |               |         | 1000pF | ±2%    | GRM1552C1H102GA01# |  |
|        |               |         |        | ±5%    | GRM1552C1H102JA01# |  |
|        | 10Vdc         | SL      | 1200pF | ±5%    | GRM1551X1A122JA01# |  |
|        |               |         | 1500pF | ±5%    | GRM1551X1A152JA01# |  |
|        |               |         | 1800pF | ±5%    | GRM1551X1A182JA01# |  |

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |  |
|--------|---------------|---------|--------|------|--------------------|--|
| 0.55mm | 10Vdc         | SL      | 2200pF | ±5%  | GRM1551X1A222JA01# |  |
|        |               |         | 2700pF | ±5%  | GRM1551X1A272JA01# |  |
|        |               |         | 3300pF | ±5%  | GRM1551X1A332JA01# |  |
|        |               |         | 3900pF | ±5%  | GRM1551X1A392JA01# |  |
|        |               |         | 4700pF | ±5%  | GRM1551X1A472JA01# |  |
|        |               |         |        |      |                    |  |
|        |               | U2J     | 1200pF | ±5%  | GRM1557U1A122JA01# |  |
|        |               |         | 1500pF | ±5%  | GRM1557U1A152JA01# |  |
|        |               |         | 1800pF | ±5%  | GRM1557U1A182JA01# |  |
|        |               |         | 2200pF | ±5%  | GRM1557U1A222JA01# |  |
|        |               |         | 2700pF | ±5%  | GRM1557U1A272JA01# |  |
|        |               |         | 3300pF | ±5%  | GRM1557U1A332JA01# |  |
|        |               |         | 3900pF | ±5%  | GRM1557U1A392JA01# |  |
|        |               |         | 4700pF | ±5%  | GRM1557U1A472JA01# |  |
|        |               |         |        |      |                    |  |
|        |               | UJ      | 1200pF | ±5%  | GRM1553U1A122JA01# |  |
|        |               |         | 1500pF | ±5%  | GRM1553U1A152JA01# |  |
|        |               |         | 1800pF | ±5%  | GRM1553U1A182JA01# |  |
|        |               |         | 2200pF | ±5%  | GRM1553U1A222JA01# |  |
|        |               |         | 2700pF | ±5%  | GRM1553U1A272JA01# |  |
|        |               |         | 3300pF | ±5%  | GRM1553U1A332JA01# |  |
|        |               |         | 3900pF | ±5%  | GRM1553U1A392JA01# |  |
|        |               |         | 4700pF | ±5%  | GRM1553U1A472JA01# |  |

1.6×0.8mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol.    | Part Number        |  |
|--------|---------------|---------|---------|---------|--------------------|--|
| 0.5mm  | 50Vdc         | SL      | 2200pF  | ±5%     | GRM1851X1H222JA44# |  |
|        |               |         | 2700pF  | ±5%     | GRM1851X1H272JA44# |  |
|        |               |         | 3300pF  | ±5%     | GRM1851X1H332JA44# |  |
|        |               |         | 3900pF  | ±5%     | GRM1851X1H392JA44# |  |
|        |               |         | 4700pF  | ±5%     | GRM1851X1H472JA44# |  |
|        |               |         |         |         |                    |  |
|        |               | U2J     | 2200pF  | ±5%     | GRM1857U1H222JA44# |  |
|        |               |         | 2700pF  | ±5%     | GRM1857U1H272JA44# |  |
|        |               |         | 3300pF  | ±5%     | GRM1857U1H332JA44# |  |
|        |               |         | 3900pF  | ±5%     | GRM1857U1H392JA44# |  |
|        |               |         | 4700pF  | ±5%     | GRM1857U1H472JA44# |  |
|        |               |         |         |         |                    |  |
|        |               | UJ      | 2200pF  | ±5%     | GRM1853U1H222JA44# |  |
|        |               |         | 2700pF  | ±5%     | GRM1853U1H272JA44# |  |
|        |               |         | 3300pF  | ±5%     | GRM1853U1H332JA44# |  |
|        |               |         | 3900pF  | ±5%     | GRM1853U1H392JA44# |  |
|        |               |         | 4700pF  | ±5%     | GRM1853U1H472JA44# |  |
|        |               |         |         |         |                    |  |
|        | 10Vdc         | SL      | 5600pF  | ±5%     | GRM1851X1A562JA44# |  |
|        |               |         | 6800pF  | ±5%     | GRM1851X1A682JA44# |  |
|        |               |         | 8200pF  | ±5%     | GRM1851X1A822JA44# |  |
|        |               |         | 10000pF | ±5%     | GRM1851X1A103JA44# |  |
|        |               | U2J     | 5600pF  | ±5%     | GRM1857U1A562JA44# |  |
|        |               |         | 6800pF  | ±5%     | GRM1857U1A682JA44# |  |
|        | 100Vdc        | UJ      | 5600pF  | ±5%     | GRM1853U1A562JA44# |  |
|        |               |         | 6800pF  | ±5%     | GRM1853U1A682JA44# |  |
|        |               |         | 8200pF  | ±5%     | GRM1853U1A822JA44# |  |
|        |               |         | 10000pF | ±5%     | GRM1853U1A103JA44# |  |
|        |               | COG     | 0.50pF  | ±0.05pF | GRM1885C2AR50WA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.6×0.8mm)

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |  |
|--------|---------------|---------|--------|---------|--------------------|--|
| 0.9mm  | 100Vdc        | COG     | 0.50pF | ±0.1pF  | GRM1885C2AR50BA01# |  |
|        |               |         |        | ±0.05pF | GRM1885C2AR60WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2AR60BA01# |  |
|        |               |         | 0.70pF | ±0.05pF | GRM1885C2AR70WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2AR70BA01# |  |
|        |               |         | 0.80pF | ±0.05pF | GRM1885C2AR80WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2AR80BA01# |  |
|        |               |         | 0.90pF | ±0.05pF | GRM1885C2AR90WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2AR90BA01# |  |
|        |               |         | 1.0pF  | ±0.05pF | GRM1885C2A1R0WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2A1R0BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C2A1R0CA01# |  |
|        |               |         | 1.1pF  | ±0.05pF | GRM1885C2A1R1WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2A1R1BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C2A1R1CA01# |  |
|        |               |         | 1.2pF  | ±0.05pF | GRM1885C2A1R2WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2A1R2BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C2A1R2CA01# |  |
|        |               |         | 1.3pF  | ±0.05pF | GRM1885C2A1R3WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2A1R3BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C2A1R3CA01# |  |
|        |               |         | 1.4pF  | ±0.05pF | GRM1885C2A1R4WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2A1R4BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C2A1R4CA01# |  |
|        |               |         | 1.5pF  | ±0.05pF | GRM1885C2A1R5WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2A1R5BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C2A1R5CA01# |  |
|        |               |         | 1.6pF  | ±0.05pF | GRM1885C2A1R6WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2A1R6BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C2A1R6CA01# |  |
|        |               |         | 1.7pF  | ±0.05pF | GRM1885C2A1R7WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2A1R7BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C2A1R7CA01# |  |
|        |               |         | 1.8pF  | ±0.05pF | GRM1885C2A1R8WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2A1R8BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C2A1R8CA01# |  |
|        |               |         | 1.9pF  | ±0.05pF | GRM1885C2A1R9WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2A1R9BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C2A1R9CA01# |  |
|        |               |         | 2.0pF  | ±0.05pF | GRM1885C2A2R0WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2A2R0BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C2A2R0CA01# |  |
|        |               |         | 2.1pF  | ±0.05pF | GRM1885C2A2R1WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2A2R1BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C2A2R1CA01# |  |
|        |               |         | 2.2pF  | ±0.05pF | GRM1885C2A2R2WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2A2R2BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C2A2R2CA01# |  |
|        |               |         | 2.3pF  | ±0.05pF | GRM1885C2A2R3WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2A2R3BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C2A2R3CA01# |  |
|        |               |         | 2.4pF  | ±0.05pF | GRM1885C2A2R4WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2A2R4BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C2A2R4CA01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.9mm  | 100Vdc        | COG     | 2.5pF | ±0.05pF | GRM1885C2A2R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A2R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A2R5CA01# |  |
|        |               |         | 2.6pF | ±0.05pF | GRM1885C2A2R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A2R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A2R6CA01# |  |
|        |               |         | 2.7pF | ±0.05pF | GRM1885C2A2R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A2R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A2R7CA01# |  |
|        |               |         | 2.8pF | ±0.05pF | GRM1885C2A2R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A2R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A2R8CA01# |  |
|        |               |         | 2.9pF | ±0.05pF | GRM1885C2A2R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A2R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A2R9CA01# |  |
|        |               |         | 3.0pF | ±0.05pF | GRM1885C2A3R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A3R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A3R0CA01# |  |
|        |               |         | 3.1pF | ±0.05pF | GRM1885C2A3R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A3R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A3R1CA01# |  |
|        |               |         | 3.2pF | ±0.05pF | GRM1885C2A3R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A3R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A3R2CA01# |  |
|        |               |         | 3.3pF | ±0.05pF | GRM1885C2A3R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A3R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A3R3CA01# |  |
|        |               |         | 3.4pF | ±0.05pF | GRM1885C2A3R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A3R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A3R4CA01# |  |
|        |               |         | 3.5pF | ±0.05pF | GRM1885C2A3R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A3R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A3R5CA01# |  |
|        |               |         | 3.6pF | ±0.05pF | GRM1885C2A3R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A3R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A3R6CA01# |  |
|        |               |         | 3.7pF | ±0.05pF | GRM1885C2A3R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A3R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A3R7CA01# |  |
|        |               |         | 3.8pF | ±0.05pF | GRM1885C2A3R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A3R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A3R8CA01# |  |
|        |               |         | 3.9pF | ±0.05pF | GRM1885C2A3R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A3R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A3R9CA01# |  |
|        |               |         | 4.0pF | ±0.05pF | GRM1885C2A4R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A4R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A4R0CA01# |  |
|        |               |         | 4.1pF | ±0.05pF | GRM1885C2A4R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A4R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A4R1CA01# |  |
|        |               |         | 4.2pF | ±0.05pF | GRM1885C2A4R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A4R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A4R2CA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.6×0.8mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.    | Tol.               | Part Number        |       |         |                    |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|---------|--------------------|--------------------|-------|---------|--------------------|--|
| 0.9mm  | 100Vdc        | COG     | 4.3pF | ±0.05pF | GRM1885C2A4R3WA01# |  | 0.9mm  | 100Vdc        | COG     | 5.8pF   | ±0.25pF            | GRM1885C2A5R8CA01# |       |         |                    |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A4R3BA01# |  |        |               |         |         | ±0.5pF             | GRM1885C2A5R8DA01# |       |         |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C2A4R3CA01# |  |        |               |         | 5.9pF   | ±0.05pF            | GRM1885C2A5R9WA01# |       |         |                    |  |
|        |               |         | 4.4pF | ±0.05pF | GRM1885C2A4R4WA01# |  |        |               |         |         | ±0.1pF             | GRM1885C2A5R9BA01# |       |         |                    |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A4R4BA01# |  |        |               |         |         | ±0.25pF            | GRM1885C2A5R9CA01# |       |         |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C2A4R4CA01# |  |        |               |         | ±0.5pF  | GRM1885C2A5R9DA01# |                    |       |         |                    |  |
|        |               |         | 4.5pF | ±0.05pF | GRM1885C2A4R5WA01# |  |        |               |         | 6.0pF   | ±0.05pF            | GRM1885C2A6R0WA01# |       |         |                    |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A4R5BA01# |  |        |               |         |         | ±0.1pF             | GRM1885C2A6R0BA01# |       |         |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C2A4R5CA01# |  |        |               |         |         | ±0.25pF            | GRM1885C2A6R0CA01# |       |         |                    |  |
|        |               |         | 4.6pF | ±0.05pF | GRM1885C2A4R6WA01# |  |        |               |         | ±0.5pF  | GRM1885C2A6R0DA01# |                    | 6.1pF | ±0.05pF | GRM1885C2A6R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A4R6BA01# |  |        |               |         | ±0.1pF  | GRM1885C2A6R1BA01# |                    |       |         |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C2A4R6CA01# |  |        |               |         | ±0.25pF | GRM1885C2A6R1CA01# |                    |       |         |                    |  |
|        |               |         | 4.7pF | ±0.05pF | GRM1885C2A4R7WA01# |  |        |               |         | ±0.5pF  | GRM1885C2A6R1DA01# |                    | 6.2pF | ±0.05pF | GRM1885C2A6R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A4R7BA01# |  |        |               |         | ±0.1pF  | GRM1885C2A6R2BA01# |                    |       |         |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C2A4R7CA01# |  |        |               |         | ±0.25pF | GRM1885C2A6R2CA01# |                    |       |         |                    |  |
|        |               |         | 4.8pF | ±0.05pF | GRM1885C2A4R8WA01# |  |        |               |         | ±0.5pF  | GRM1885C2A6R2DA01# |                    | 6.3pF | ±0.05pF | GRM1885C2A6R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A4R8BA01# |  |        |               |         | ±0.1pF  | GRM1885C2A6R3BA01# |                    |       |         |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C2A4R8CA01# |  |        |               |         | ±0.25pF | GRM1885C2A6R3CA01# |                    |       |         |                    |  |
|        |               |         | 4.9pF | ±0.05pF | GRM1885C2A4R9WA01# |  |        |               |         | ±0.5pF  | GRM1885C2A6R3DA01# |                    | 6.4pF | ±0.05pF | GRM1885C2A6R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A4R9BA01# |  |        |               |         | ±0.1pF  | GRM1885C2A6R4BA01# |                    |       |         |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C2A4R9CA01# |  |        |               |         | ±0.25pF | GRM1885C2A6R4CA01# |                    |       |         |                    |  |
|        |               |         | 5.0pF | ±0.05pF | GRM1885C2A5R0WA01# |  |        |               |         | ±0.5pF  | GRM1885C2A6R4DA01# |                    | 6.5pF | ±0.05pF | GRM1885C2A6R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A5R0BA01# |  |        |               |         | ±0.1pF  | GRM1885C2A6R5BA01# |                    |       |         |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C2A5R0CA01# |  |        |               |         | ±0.25pF | GRM1885C2A6R5CA01# |                    |       |         |                    |  |
|        |               |         | 5.1pF | ±0.05pF | GRM1885C2A5R1WA01# |  |        |               |         | ±0.5pF  | GRM1885C2A6R5DA01# |                    | 6.6pF | ±0.05pF | GRM1885C2A6R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A5R1BA01# |  |        |               |         | ±0.1pF  | GRM1885C2A6R6BA01# |                    |       |         |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C2A5R1CA01# |  |        |               |         | ±0.25pF | GRM1885C2A6R6CA01# |                    |       |         |                    |  |
|        |               |         | 5.2pF | ±0.05pF | GRM1885C2A5R2WA01# |  |        |               |         | ±0.5pF  | GRM1885C2A6R6DA01# |                    | 6.7pF | ±0.05pF | GRM1885C2A6R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A5R2BA01# |  |        |               |         | ±0.1pF  | GRM1885C2A6R7BA01# |                    |       |         |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C2A5R2CA01# |  |        |               |         | ±0.25pF | GRM1885C2A6R7CA01# |                    |       |         |                    |  |
|        |               |         | 5.3pF | ±0.05pF | GRM1885C2A5R3WA01# |  |        |               |         | ±0.5pF  | GRM1885C2A6R7DA01# |                    | 6.8pF | ±0.05pF | GRM1885C2A6R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A5R3BA01# |  |        |               |         | ±0.1pF  | GRM1885C2A6R8BA01# |                    |       |         |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C2A5R3CA01# |  |        |               |         | ±0.25pF | GRM1885C2A6R8CA01# |                    |       |         |                    |  |
|        |               |         | 5.4pF | ±0.05pF | GRM1885C2A5R4WA01# |  |        |               |         | ±0.5pF  | GRM1885C2A6R8DA01# |                    | 6.9pF | ±0.05pF | GRM1885C2A6R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A5R4BA01# |  |        |               |         | ±0.1pF  | GRM1885C2A6R9BA01# |                    |       |         |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C2A5R4CA01# |  |        |               |         | ±0.25pF | GRM1885C2A6R9CA01# |                    |       |         |                    |  |
|        |               |         | 5.5pF | ±0.05pF | GRM1885C2A5R5WA01# |  |        |               |         | ±0.5pF  | GRM1885C2A6R9DA01# |                    | 7.0pF | ±0.05pF | GRM1885C2A7R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A5R5BA01# |  |        |               |         | ±0.1pF  | GRM1885C2A7R0BA01# |                    |       |         |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C2A5R5CA01# |  |        |               |         | ±0.25pF | GRM1885C2A7R0CA01# |                    |       |         |                    |  |
|        |               |         | 5.6pF | ±0.05pF | GRM1885C2A5R6WA01# |  |        |               |         | ±0.5pF  | GRM1885C2A5R6DA01# |                    | 7.1pF | ±0.05pF | GRM1885C2A7R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A5R6BA01# |  |        |               |         | ±0.1pF  | GRM1885C2A7R1BA01# |                    |       |         |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C2A5R6CA01# |  |        |               |         | ±0.25pF | GRM1885C2A7R1CA01# |                    |       |         |                    |  |
|        |               |         | 5.7pF | ±0.05pF | GRM1885C2A5R7WA01# |  |        |               |         | ±0.5pF  | GRM1885C2A5R7DA01# |                    |       | ±0.5pF  | GRM1885C2A7R1DA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A5R7BA01# |  |        |               |         |         |                    |                    |       |         |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C2A5R7CA01# |  |        |               |         |         |                    |                    |       |         |                    |  |
|        |               |         | 5.8pF | ±0.05pF | GRM1885C2A5R8WA01# |  |        |               |         |         |                    |                    |       |         |                    |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A5R8BA01# |  |        |               |         |         |                    |                    |       |         |                    |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.6×0.8mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.9mm  | 100Vdc        | COG     | 7.2pF | ±0.05pF | GRM1885C2A7R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A7R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A7R2CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A7R2DA01# |  |
|        |               |         | 7.3pF | ±0.05pF | GRM1885C2A7R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A7R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A7R3CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A7R3DA01# |  |
|        |               |         | 7.4pF | ±0.05pF | GRM1885C2A7R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A7R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A7R4CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A7R4DA01# |  |
|        |               |         | 7.5pF | ±0.05pF | GRM1885C2A7R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A7R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A7R5CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A7R5DA01# |  |
|        |               |         | 7.6pF | ±0.05pF | GRM1885C2A7R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A7R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A7R6CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A7R6DA01# |  |
|        |               |         | 7.7pF | ±0.05pF | GRM1885C2A7R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A7R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A7R7CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A7R7DA01# |  |
|        |               |         | 7.8pF | ±0.05pF | GRM1885C2A7R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A7R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A7R8CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A7R8DA01# |  |
|        |               |         | 7.9pF | ±0.05pF | GRM1885C2A7R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A7R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A7R9CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A7R9DA01# |  |
|        |               |         | 8.0pF | ±0.05pF | GRM1885C2A8R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A8R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A8R0CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A8R0DA01# |  |
|        |               |         | 8.1pF | ±0.05pF | GRM1885C2A8R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A8R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A8R1CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A8R1DA01# |  |
|        |               |         | 8.2pF | ±0.05pF | GRM1885C2A8R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A8R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A8R2CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A8R2DA01# |  |
|        |               |         | 8.3pF | ±0.05pF | GRM1885C2A8R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A8R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A8R3CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A8R3DA01# |  |
|        |               |         | 8.4pF | ±0.05pF | GRM1885C2A8R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A8R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A8R4CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A8R4DA01# |  |
|        |               |         | 8.5pF | ±0.05pF | GRM1885C2A8R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A8R5BA01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.9mm  | 100Vdc        | COG     | 8.5pF | ±0.25pF | GRM1885C2A8R5CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A8R5DA01# |  |
|        |               |         | 8.6pF | ±0.05pF | GRM1885C2A8R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A8R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A8R6CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A8R6DA01# |  |
|        |               |         | 8.7pF | ±0.05pF | GRM1885C2A8R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A8R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A8R7CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A8R7DA01# |  |
|        |               |         | 8.8pF | ±0.05pF | GRM1885C2A8R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A8R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A8R8CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A8R8DA01# |  |
|        |               |         | 8.9pF | ±0.05pF | GRM1885C2A8R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A8R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A8R9CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A8R9DA01# |  |
|        |               |         | 9.0pF | ±0.05pF | GRM1885C2A9R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A9R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A9R0CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A9R0DA01# |  |
|        |               |         | 9.1pF | ±0.05pF | GRM1885C2A9R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A9R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A9R1CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A9R1DA01# |  |
|        |               |         | 9.2pF | ±0.05pF | GRM1885C2A9R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A9R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A9R2CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A9R2DA01# |  |
|        |               |         | 9.3pF | ±0.05pF | GRM1885C2A9R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A9R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A9R3CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A9R3DA01# |  |
|        |               |         | 9.4pF | ±0.05pF | GRM1885C2A9R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A9R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A9R4CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A9R4DA01# |  |
|        |               |         | 9.5pF | ±0.05pF | GRM1885C2A9R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A9R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A9R5CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A9R5DA01# |  |
|        |               |         | 9.6pF | ±0.05pF | GRM1885C2A9R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A9R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A9R6CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A9R6DA01# |  |
|        |               |         | 9.7pF | ±0.05pF | GRM1885C2A9R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A9R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A9R7CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A9R7DA01# |  |
|        |               |         | 9.8pF | ±0.05pF | GRM1885C2A9R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C2A9R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C2A9R8CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C2A9R8DA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.6×0.8mm)

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|--------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 0.9mm  | 100Vdc        | COG     | 9.9pF  | ±0.05pF | GRM1885C2A9R9WA01# |  | 0.9mm  | 100Vdc        | CK      | 1.4pF | ±0.1pF  | GRM1884C2A1R4BA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C2A9R9BA01# |  |        |               |         |       | ±0.25pF | GRM1884C2A1R4CA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C2A9R9CA01# |  |        |               |         | 1.5pF | ±0.05pF | GRM1884C2A1R5WA01# |  |
|        |               |         |        | ±0.5pF  | GRM1885C2A9R9DA01# |  |        |               |         |       | ±0.1pF  | GRM1884C2A1R5BA01# |  |
|        |               |         | 10pF   | ±5%     | GRM1885C2A100JA01# |  |        |               |         |       | ±0.25pF | GRM1884C2A1R5CA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A120JA01# |  |        |               |         | 1.6pF | ±0.05pF | GRM1884C2A1R6WA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A150JA01# |  |        |               |         |       | ±0.1pF  | GRM1884C2A1R6BA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A180JA01# |  |        |               |         |       | ±0.25pF | GRM1884C2A1R6CA01# |  |
|        |               |         | 12pF   | ±5%     | GRM1885C2A220JA01# |  |        |               |         | 1.7pF | ±0.05pF | GRM1884C2A1R7WA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A270JA01# |  |        |               |         |       | ±0.1pF  | GRM1884C2A1R7BA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A330JA01# |  |        |               |         |       | ±0.25pF | GRM1884C2A1R7CA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A390JA01# |  |        |               |         | 1.8pF | ±0.05pF | GRM1884C2A1R8WA01# |  |
|        |               |         | 15pF   | ±5%     | GRM1885C2A470JA01# |  |        |               |         |       | ±0.1pF  | GRM1884C2A1R8BA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A560JA01# |  |        |               |         |       | ±0.25pF | GRM1884C2A1R8CA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A680JA01# |  |        |               |         | 1.9pF | ±0.05pF | GRM1884C2A1R9WA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A820JA01# |  |        |               |         |       | ±0.1pF  | GRM1884C2A1R9BA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A101JA01# |  |        |               |         |       | ±0.25pF | GRM1884C2A1R9CA01# |  |
|        |               |         | 18pF   | ±5%     | GRM1885C2A121JA01# |  |        |               |         | 2.0pF | ±0.05pF | GRM1884C2A2R0WA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A151JA01# |  |        |               |         |       | ±0.1pF  | GRM1884C2A2R0BA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A181JA01# |  |        |               |         |       | ±0.25pF | GRM1884C2A2R0CA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A221JA01# |  |        |               | CJ      | 2.1pF | ±0.05pF | GRM1883C2A2R1WA01# |  |
|        |               |         | 22pF   | ±5%     | GRM1885C2A271JA01# |  |        |               |         |       | ±0.1pF  | GRM1883C2A2R1BA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A331JA01# |  |        |               |         |       | ±0.25pF | GRM1883C2A2R1CA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A391JA01# |  |        |               |         | 2.2pF | ±0.05pF | GRM1883C2A2R2WA01# |  |
|        |               |         | 27pF   | ±5%     | GRM1885C2A471JA01# |  |        |               |         |       | ±0.1pF  | GRM1883C2A2R2BA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A561JA01# |  |        |               |         |       | ±0.25pF | GRM1883C2A2R2CA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A681JA01# |  |        |               |         | 2.3pF | ±0.05pF | GRM1883C2A2R3WA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A821JA01# |  |        |               |         |       | ±0.1pF  | GRM1883C2A2R3BA01# |  |
|        |               |         | 33pF   | ±5%     | GRM1885C2A102JA01# |  |        |               |         |       | ±0.25pF | GRM1883C2A2R3CA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A122JA01# |  |        |               |         | 2.4pF | ±0.05pF | GRM1883C2A2R4WA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A152JA01# |  |        |               |         |       | ±0.1pF  | GRM1883C2A2R4BA01# |  |
|        |               |         |        | ±5%     | GRM1885C2A152JA01# |  |        |               |         |       | ±0.25pF | GRM1883C2A2R4CA01# |  |
|        |               | CK      | 0.50pF | ±0.05pF | GRM1884C2AR50WA01# |  |        |               |         | 2.5pF | ±0.05pF | GRM1883C2A2R5WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1884C2AR50BA01# |  |        |               |         |       | ±0.1pF  | GRM1883C2A2R5BA01# |  |
|        |               |         |        | ±0.25pF | GRM1884C2AR50CA01# |  |        |               |         |       | ±0.25pF | GRM1883C2A2R5CA01# |  |
|        |               |         | 0.60pF | ±0.05pF | GRM1884C2AR60WA01# |  |        |               |         | 2.6pF | ±0.05pF | GRM1883C2A2R6WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1884C2AR60BA01# |  |        |               |         |       | ±0.1pF  | GRM1883C2A2R6BA01# |  |
|        |               |         |        | ±0.25pF | GRM1884C2AR60CA01# |  |        |               |         |       | ±0.25pF | GRM1883C2A2R6CA01# |  |
|        |               |         | 0.70pF | ±0.05pF | GRM1884C2AR70WA01# |  |        |               |         | 2.7pF | ±0.05pF | GRM1883C2A2R7WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1884C2AR70BA01# |  |        |               |         |       | ±0.1pF  | GRM1883C2A2R7BA01# |  |
|        |               |         |        | ±0.25pF | GRM1884C2AR70CA01# |  |        |               |         |       | ±0.25pF | GRM1883C2A2R7CA01# |  |
|        |               |         | 0.80pF | ±0.05pF | GRM1884C2AR80WA01# |  |        |               |         | 2.8pF | ±0.05pF | GRM1883C2A2R8WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1884C2AR80BA01# |  |        |               |         |       | ±0.1pF  | GRM1883C2A2R8BA01# |  |
|        |               |         |        | ±0.25pF | GRM1884C2AR80CA01# |  |        |               |         |       | ±0.25pF | GRM1883C2A2R8CA01# |  |
|        |               |         | 0.90pF | ±0.05pF | GRM1884C2AR90WA01# |  |        |               |         | 2.9pF | ±0.05pF | GRM1883C2A2R9WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1884C2AR90BA01# |  |        |               |         |       | ±0.1pF  | GRM1883C2A2R9BA01# |  |
|        |               |         |        | ±0.25pF | GRM1884C2AR90CA01# |  |        |               |         |       | ±0.25pF | GRM1883C2A2R9CA01# |  |
|        |               |         | 1.0pF  | ±0.05pF | GRM1884C2A1R0WA01# |  |        |               |         | 3.0pF | ±0.05pF | GRM1883C2A3R0WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1884C2A1R0BA01# |  |        |               |         |       | ±0.1pF  | GRM1883C2A3R0BA01# |  |
|        |               |         |        | ±0.25pF | GRM1884C2A1R0CA01# |  |        |               |         |       | ±0.25pF | GRM1883C2A3R0CA01# |  |
|        |               |         | 1.1pF  | ±0.05pF | GRM1884C2A1R1WA01# |  |        |               |         | 3.1pF | ±0.05pF | GRM1883C2A3R1WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1884C2A1R1BA01# |  |        |               |         |       | ±0.1pF  | GRM1883C2A3R1BA01# |  |
|        |               |         |        | ±0.25pF | GRM1884C2A1R1CA01# |  |        |               |         |       | ±0.25pF | GRM1883C2A3R1CA01# |  |
|        |               |         | 1.2pF  | ±0.05pF | GRM1884C2A1R2WA01# |  |        |               |         | 3.2pF | ±0.05pF | GRM1883C2A3R2WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1884C2A1R2BA01# |  |        |               |         |       | ±0.1pF  | GRM1883C2A3R2BA01# |  |
|        |               |         |        | ±0.25pF | GRM1884C2A1R2CA01# |  |        |               |         |       | ±0.25pF | GRM1883C2A3R2CA01# |  |
|        |               |         | 1.3pF  | ±0.05pF | GRM1884C2A1R3WA01# |  |        |               |         |       | ±0.1pF  | GRM1883C2A3R3BA01# |  |
|        |               |         |        | ±0.1pF  | GRM1884C2A1R3BA01# |  |        |               |         |       | ±0.25pF | GRM1883C2A3R3CA01# |  |
|        |               |         |        | ±0.25pF | GRM1884C2A1R3CA01# |  |        |               |         |       | ±0.1pF  | GRM1883C2A3R4BA01# |  |
|        |               |         | 1.4pF  | ±0.05pF | GRM1884C2A1R4WA01# |  |        |               |         |       | ±0.25pF | GRM1883C2A3R4CA01# |  |
|        |               |         |        | ±0.1pF  | GRM1884C2A1R4BA01# |  |        |               |         |       | ±0.1pF  | GRM1884C2A1R4CA01# |  |
|        |               |         |        | ±0.25pF | GRM1884C2A1R4CA01# |  |        |               |         |       | ±0.25pF | GRM1884C2A1R4CA01# |  |
|        |               |         |        | ±0.5pF  | GRM1885C2A9R9DA01# |  |        |               |         |       | ±0.5pF  | GRM1885C2A9R9DA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.6×0.8mm)

| T max. | Rated Voltage | TC Code | Cap.    | Tol.               | Part Number        |         | T max. | Rated Voltage | TC Code            | Cap.               | Tol.    | Part Number        |  |
|--------|---------------|---------|---------|--------------------|--------------------|---------|--------|---------------|--------------------|--------------------|---------|--------------------|--|
| 0.9mm  | 100Vdc        | CJ      | 3.2pF   | ±0.1pF             | GRM1883C2A3R2BA01# |         | 0.9mm  | 100Vdc        | CH                 | 5.0pF              | ±0.1pF  | GRM1882C2A5R0BA01# |  |
|        |               |         |         | ±0.25pF            | GRM1883C2A3R2CA01# |         |        |               |                    |                    | ±0.25pF | GRM1882C2A5R0CA01# |  |
|        |               |         | 3.3pF   | ±0.05pF            | GRM1883C2A3R3WA01# |         |        |               |                    | 5.1pF              | ±0.05pF | GRM1882C2A5R1WA01# |  |
|        |               |         |         | ±0.1pF             | GRM1883C2A3R3BA01# |         |        |               |                    |                    | ±0.1pF  | GRM1882C2A5R1BA01# |  |
|        |               |         |         | ±0.25pF            | GRM1883C2A3R3CA01# |         |        |               |                    |                    | ±0.25pF | GRM1882C2A5R1CA01# |  |
|        |               |         |         | ±0.5pF             | GRM1882C2A5R1DA01# |         |        |               |                    |                    |         |                    |  |
|        |               |         | 3.4pF   | ±0.05pF            | GRM1883C2A3R4WA01# |         |        |               |                    | 5.2pF              | ±0.05pF | GRM1882C2A5R2WA01# |  |
|        |               |         |         | ±0.1pF             | GRM1883C2A3R4BA01# |         |        |               |                    |                    | ±0.1pF  | GRM1882C2A5R2BA01# |  |
|        |               |         |         | ±0.25pF            | GRM1883C2A3R4CA01# |         |        |               |                    |                    | ±0.25pF | GRM1882C2A5R2CA01# |  |
|        |               |         | 3.5pF   | ±0.05pF            | GRM1883C2A3R5WA01# |         |        |               |                    |                    | ±0.5pF  | GRM1882C2A5R2DA01# |  |
|        |               |         |         | ±0.1pF             | GRM1883C2A3R5BA01# |         |        |               |                    | 5.3pF              | ±0.05pF | GRM1882C2A5R3WA01# |  |
|        |               |         |         | ±0.25pF            | GRM1883C2A3R5CA01# |         |        |               |                    |                    | ±0.1pF  | GRM1882C2A5R3BA01# |  |
|        |               |         | 3.6pF   | ±0.05pF            | GRM1883C2A3R6WA01# |         |        |               |                    |                    | ±0.25pF | GRM1882C2A5R3CA01# |  |
|        |               |         |         | ±0.1pF             | GRM1883C2A3R6BA01# |         |        |               |                    |                    | ±0.5pF  | GRM1882C2A5R3DA01# |  |
|        |               |         |         | ±0.25pF            | GRM1883C2A3R6CA01# |         |        |               |                    | 5.4pF              | ±0.05pF | GRM1882C2A5R4WA01# |  |
|        |               |         | 3.7pF   | ±0.05pF            | GRM1883C2A3R7WA01# |         |        |               |                    |                    | ±0.1pF  | GRM1882C2A5R4BA01# |  |
|        |               |         |         | ±0.1pF             | GRM1883C2A3R7BA01# |         |        |               |                    |                    | ±0.25pF | GRM1882C2A5R4CA01# |  |
|        |               |         |         | ±0.25pF            | GRM1883C2A3R7CA01# |         |        |               |                    |                    | ±0.5pF  | GRM1882C2A5R4DA01# |  |
|        |               |         | 3.8pF   | ±0.05pF            | GRM1883C2A3R8WA01# |         |        |               |                    | 5.5pF              | ±0.05pF | GRM1882C2A5R5WA01# |  |
|        |               |         |         | ±0.1pF             | GRM1883C2A3R8BA01# |         |        |               |                    |                    | ±0.1pF  | GRM1882C2A5R5BA01# |  |
|        |               |         |         | ±0.25pF            | GRM1883C2A3R8CA01# |         |        |               |                    |                    | ±0.25pF | GRM1882C2A5R5CA01# |  |
|        |               |         | 3.9pF   | ±0.05pF            | GRM1883C2A3R9WA01# |         |        |               |                    |                    | ±0.5pF  | GRM1882C2A5R5DA01# |  |
|        |               |         |         | ±0.1pF             | GRM1883C2A3R9BA01# |         |        |               |                    | 5.6pF              | ±0.05pF | GRM1882C2A5R6WA01# |  |
|        |               |         |         | ±0.25pF            | GRM1883C2A3R9CA01# |         |        |               |                    |                    | ±0.1pF  | GRM1882C2A5R6BA01# |  |
|        |               |         | 4.0pF   | ±0.05pF            | GRM1882C2A4R0WA01# |         |        |               |                    |                    | ±0.25pF | GRM1882C2A5R6CA01# |  |
|        |               |         |         | ±0.1pF             | GRM1882C2A4R0BA01# |         |        |               |                    |                    | ±0.5pF  | GRM1882C2A5R6DA01# |  |
|        |               |         |         | ±0.25pF            | GRM1882C2A4R0CA01# |         |        |               |                    | 5.7pF              | ±0.05pF | GRM1882C2A5R7WA01# |  |
|        |               |         | 4.1pF   | ±0.05pF            | GRM1882C2A4R1WA01# |         |        |               |                    |                    | ±0.1pF  | GRM1882C2A5R7BA01# |  |
|        |               |         |         | ±0.1pF             | GRM1882C2A4R1BA01# |         |        |               |                    |                    | ±0.25pF | GRM1882C2A5R7CA01# |  |
|        |               |         |         | ±0.25pF            | GRM1882C2A4R1CA01# |         |        |               |                    |                    | ±0.5pF  | GRM1882C2A5R7DA01# |  |
|        |               |         | 4.2pF   | ±0.05pF            | GRM1882C2A4R2WA01# |         |        |               |                    | 5.8pF              | ±0.05pF | GRM1882C2A5R8WA01# |  |
|        |               |         |         | ±0.1pF             | GRM1882C2A4R2BA01# |         |        |               |                    |                    | ±0.1pF  | GRM1882C2A5R8BA01# |  |
|        |               |         |         | ±0.25pF            | GRM1882C2A4R2CA01# |         |        |               |                    |                    | ±0.25pF | GRM1882C2A5R8CA01# |  |
|        |               |         | 4.3pF   | ±0.05pF            | GRM1882C2A4R3WA01# |         |        |               |                    |                    | ±0.5pF  | GRM1882C2A5R8DA01# |  |
|        |               |         |         | ±0.1pF             | GRM1882C2A4R3BA01# |         |        |               |                    | 5.9pF              | ±0.05pF | GRM1882C2A5R9WA01# |  |
|        |               |         |         | ±0.25pF            | GRM1882C2A4R3CA01# |         |        |               |                    |                    | ±0.1pF  | GRM1882C2A5R9BA01# |  |
|        |               | 4.4pF   | ±0.05pF | GRM1882C2A4R4WA01# |                    | ±0.25pF |        |               | GRM1882C2A5R9CA01# |                    |         |                    |  |
|        |               |         | ±0.1pF  | GRM1882C2A4R4BA01# |                    | ±0.5pF  |        |               | GRM1882C2A5R9DA01# |                    |         |                    |  |
|        |               |         | ±0.25pF | GRM1882C2A4R4CA01# |                    | 6.0pF   |        |               | ±0.05pF            | GRM1882C2A6R0WA01# |         |                    |  |
|        |               | 4.5pF   | ±0.05pF | GRM1882C2A4R5WA01# |                    |         |        |               | ±0.1pF             | GRM1882C2A6R0BA01# |         |                    |  |
|        |               |         | ±0.1pF  | GRM1882C2A4R5BA01# |                    |         |        |               | ±0.25pF            | GRM1882C2A6R0CA01# |         |                    |  |
|        |               |         | ±0.25pF | GRM1882C2A4R5CA01# |                    |         |        |               | ±0.5pF             | GRM1882C2A6R0DA01# |         |                    |  |
|        |               | 4.6pF   | ±0.05pF | GRM1882C2A4R6WA01# |                    | 6.1pF   |        |               | ±0.05pF            | GRM1882C2A6R1WA01# |         |                    |  |
|        |               |         | ±0.1pF  | GRM1882C2A4R6BA01# |                    |         |        |               | ±0.1pF             | GRM1882C2A6R1BA01# |         |                    |  |
|        |               |         | ±0.25pF | GRM1882C2A4R6CA01# |                    |         |        |               | ±0.25pF            | GRM1882C2A6R1CA01# |         |                    |  |
|        |               | 4.7pF   | ±0.05pF | GRM1882C2A4R7WA01# |                    |         |        |               | ±0.5pF             | GRM1882C2A6R1DA01# |         |                    |  |
|        |               |         | ±0.1pF  | GRM1882C2A4R7BA01# |                    | 6.2pF   |        |               | ±0.05pF            | GRM1882C2A6R2WA01# |         |                    |  |
|        |               |         | ±0.25pF | GRM1882C2A4R7CA01# |                    |         |        |               | ±0.1pF             | GRM1882C2A6R2BA01# |         |                    |  |
|        |               | 4.8pF   | ±0.05pF | GRM1882C2A4R8WA01# |                    |         |        |               | ±0.25pF            | GRM1882C2A6R2CA01# |         |                    |  |
|        |               |         | ±0.1pF  | GRM1882C2A4R8BA01# |                    |         |        |               | ±0.5pF             | GRM1882C2A6R2DA01# |         |                    |  |
|        |               |         | ±0.25pF | GRM1882C2A4R8CA01# |                    | 6.3pF   |        |               | ±0.05pF            | GRM1882C2A6R3WA01# |         |                    |  |
|        |               | 4.9pF   | ±0.05pF | GRM1882C2A4R9WA01# |                    |         |        |               | ±0.1pF             | GRM1882C2A6R3BA01# |         |                    |  |
|        |               |         | ±0.1pF  | GRM1882C2A4R9BA01# |                    |         |        |               | ±0.25pF            | GRM1882C2A6R3CA01# |         |                    |  |
|        |               |         | ±0.25pF | GRM1882C2A4R9CA01# |                    |         |        |               | ±0.5pF             | GRM1882C2A6R3DA01# |         |                    |  |
|        |               | 5.0pF   | ±0.05pF | GRM1882C2A5R0WA01# |                    |         |        |               |                    |                    |         |                    |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.6×0.8mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 0.9mm  | 100Vdc        | CH      | 6.4pF | ±0.05pF | GRM1882C2A6R4WA01# |  | 0.9mm  | 100Vdc        | CH      | 7.7pF | ±0.25pF | GRM1882C2A7R7CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A6R4BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C2A7R7DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A6R4CA01# |  |        |               |         | 7.8pF | ±0.05pF | GRM1882C2A7R8WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A6R4DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C2A7R8BA01# |  |
|        |               |         | 6.5pF | ±0.05pF | GRM1882C2A6R5WA01# |  |        |               |         |       | ±0.25pF | GRM1882C2A7R8CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A6R5BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C2A7R8DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A6R5CA01# |  |        |               |         | 7.9pF | ±0.05pF | GRM1882C2A7R9WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A6R5DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C2A7R9BA01# |  |
|        |               |         | 6.6pF | ±0.05pF | GRM1882C2A6R6WA01# |  |        |               |         |       | ±0.25pF | GRM1882C2A7R9CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A6R6BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C2A7R9DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A6R6CA01# |  |        |               |         | 8.0pF | ±0.05pF | GRM1882C2A8R0WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A6R6DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C2A8R0BA01# |  |
|        |               |         | 6.7pF | ±0.05pF | GRM1882C2A6R7WA01# |  |        |               |         |       | ±0.25pF | GRM1882C2A8R0CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A6R7BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C2A8R0DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A6R7CA01# |  |        |               |         | 8.1pF | ±0.05pF | GRM1882C2A8R1WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A6R7DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C2A8R1BA01# |  |
|        |               |         | 6.8pF | ±0.05pF | GRM1882C2A6R8WA01# |  |        |               |         |       | ±0.25pF | GRM1882C2A8R1CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A6R8BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C2A8R1DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A6R8CA01# |  |        |               |         | 8.2pF | ±0.05pF | GRM1882C2A8R2WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A6R8DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C2A8R2BA01# |  |
|        |               |         | 6.9pF | ±0.05pF | GRM1882C2A6R9WA01# |  |        |               |         |       | ±0.25pF | GRM1882C2A8R2CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A6R9BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C2A8R2DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A6R9CA01# |  |        |               |         | 8.3pF | ±0.05pF | GRM1882C2A8R3WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A6R9DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C2A8R3BA01# |  |
|        |               |         | 7.0pF | ±0.05pF | GRM1882C2A7R0WA01# |  |        |               |         |       | ±0.25pF | GRM1882C2A8R3CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A7R0BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C2A8R3DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A7R0CA01# |  |        |               |         | 8.4pF | ±0.05pF | GRM1882C2A8R4WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A7R0DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C2A8R4BA01# |  |
|        |               |         | 7.1pF | ±0.05pF | GRM1882C2A7R1WA01# |  |        |               |         |       | ±0.25pF | GRM1882C2A8R4CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A7R1BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C2A8R4DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A7R1CA01# |  |        |               |         | 8.5pF | ±0.05pF | GRM1882C2A8R5WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A7R1DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C2A8R5BA01# |  |
|        |               |         | 7.2pF | ±0.05pF | GRM1882C2A7R2WA01# |  |        |               |         |       | ±0.25pF | GRM1882C2A8R5CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A7R2BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C2A8R5DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A7R2CA01# |  |        |               |         | 8.6pF | ±0.05pF | GRM1882C2A8R6WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A7R2DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C2A8R6BA01# |  |
|        |               |         | 7.3pF | ±0.05pF | GRM1882C2A7R3WA01# |  |        |               |         |       | ±0.25pF | GRM1882C2A8R6CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A7R3BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C2A8R6DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A7R3CA01# |  |        |               |         | 8.7pF | ±0.05pF | GRM1882C2A8R7WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A7R3DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C2A8R7BA01# |  |
|        |               |         | 7.4pF | ±0.05pF | GRM1882C2A7R4WA01# |  |        |               |         |       | ±0.25pF | GRM1882C2A8R7CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A7R4BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C2A8R7DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A7R4CA01# |  |        |               |         | 8.8pF | ±0.05pF | GRM1882C2A8R8WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A7R4DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C2A8R8BA01# |  |
|        |               |         | 7.5pF | ±0.05pF | GRM1882C2A7R5WA01# |  |        |               |         |       | ±0.25pF | GRM1882C2A8R8CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A7R5BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C2A8R8DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A7R5CA01# |  |        |               |         | 8.9pF | ±0.05pF | GRM1882C2A8R9WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A7R5DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C2A8R9BA01# |  |
|        |               |         | 7.6pF | ±0.05pF | GRM1882C2A7R6WA01# |  |        |               |         |       | ±0.25pF | GRM1882C2A8R9CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A7R6BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C2A8R9DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A7R6CA01# |  |        |               |         | 9.0pF | ±0.05pF | GRM1882C2A9R0WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A7R6DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C2A9R0BA01# |  |
|        |               |         | 7.7pF | ±0.05pF | GRM1882C2A7R7WA01# |  |        |               |         |       | ±0.25pF | GRM1882C2A9R0CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A7R7BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C2A9R0DA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.6×0.8mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.9mm  | 100Vdc        | CH      | 9.1pF | ±0.05pF | GRM1882C2A9R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A9R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A9R1CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A9R1DA01# |  |
|        |               |         | 9.2pF | ±0.05pF | GRM1882C2A9R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A9R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A9R2CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A9R2DA01# |  |
|        |               |         | 9.3pF | ±0.05pF | GRM1882C2A9R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A9R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A9R3CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A9R3DA01# |  |
|        |               |         | 9.4pF | ±0.05pF | GRM1882C2A9R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A9R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A9R4CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A9R4DA01# |  |
|        |               |         | 9.5pF | ±0.05pF | GRM1882C2A9R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A9R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A9R5CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A9R5DA01# |  |
|        |               |         | 9.6pF | ±0.05pF | GRM1882C2A9R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A9R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A9R6CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A9R6DA01# |  |
|        |               |         | 9.7pF | ±0.05pF | GRM1882C2A9R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A9R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A9R7CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A9R7DA01# |  |
|        |               |         | 9.8pF | ±0.05pF | GRM1882C2A9R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A9R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A9R8CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A9R8DA01# |  |
|        |               |         | 9.9pF | ±0.05pF | GRM1882C2A9R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C2A9R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C2A9R9CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C2A9R9DA01# |  |
|        |               |         | 10pF  | ±5%     | GRM1882C2A100JA01# |  |
|        |               |         | 12pF  | ±5%     | GRM1882C2A120JA01# |  |
|        |               |         | 15pF  | ±5%     | GRM1882C2A150JA01# |  |
|        |               |         | 18pF  | ±5%     | GRM1882C2A180JA01# |  |
|        |               |         | 22pF  | ±5%     | GRM1882C2A220JA01# |  |
|        |               |         | 27pF  | ±5%     | GRM1882C2A270JA01# |  |
|        |               |         | 33pF  | ±5%     | GRM1882C2A330JA01# |  |
|        |               |         | 39pF  | ±5%     | GRM1882C2A390JA01# |  |
|        |               |         | 47pF  | ±5%     | GRM1882C2A470JA01# |  |
|        |               |         | 56pF  | ±5%     | GRM1882C2A560JA01# |  |
|        |               |         | 68pF  | ±5%     | GRM1882C2A680JA01# |  |
|        |               |         | 82pF  | ±5%     | GRM1882C2A820JA01# |  |
|        |               |         | 100pF | ±5%     | GRM1882C2A101JA01# |  |
|        |               |         | 120pF | ±5%     | GRM1882C2A121JA01# |  |
|        |               |         | 150pF | ±5%     | GRM1882C2A151JA01# |  |
|        |               |         | 180pF | ±5%     | GRM1882C2A181JA01# |  |
|        |               |         | 220pF | ±5%     | GRM1882C2A221JA01# |  |
|        |               |         | 270pF | ±5%     | GRM1882C2A271JA01# |  |

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |  |
|--------|---------------|---------|--------|---------|--------------------|--|
| 0.9mm  | 100Vdc        | CH      | 330pF  | ±5%     | GRM1882C2A331JA01# |  |
|        |               |         | 390pF  | ±5%     | GRM1882C2A391JA01# |  |
|        |               |         | 470pF  | ±5%     | GRM1882C2A471JA01# |  |
|        |               |         | 560pF  | ±5%     | GRM1882C2A561JA01# |  |
|        |               |         | 680pF  | ±5%     | GRM1882C2A681JA01# |  |
|        |               |         | 820pF  | ±5%     | GRM1882C2A821JA01# |  |
|        |               |         | 1000pF | ±5%     | GRM1882C2A102JA01# |  |
|        |               |         | 1200pF | ±5%     | GRM1882C2A122JA01# |  |
|        |               |         | 1500pF | ±5%     | GRM1882C2A152JA01# |  |
|        |               | COG     | 0.50pF | ±0.05pF | GRM1885C1HR50WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C1HR50BA01# |  |
|        |               |         | 0.60pF | ±0.05pF | GRM1885C1HR60WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C1HR60BA01# |  |
|        |               |         | 0.70pF | ±0.05pF | GRM1885C1HR70WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C1HR70BA01# |  |
|        |               |         | 0.80pF | ±0.05pF | GRM1885C1HR80WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C1HR80BA01# |  |
|        |               |         | 0.90pF | ±0.05pF | GRM1885C1HR90WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C1HR90BA01# |  |
|        |               |         | 1.0pF  | ±0.05pF | GRM1885C1H1R0WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C1H1R0BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C1H1R0CA01# |  |
|        |               |         | 1.1pF  | ±0.05pF | GRM1885C1H1R1WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C1H1R1BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C1H1R1CA01# |  |
|        |               |         | 1.2pF  | ±0.05pF | GRM1885C1H1R2WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C1H1R2BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C1H1R2CA01# |  |
|        |               |         | 1.3pF  | ±0.05pF | GRM1885C1H1R3WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C1H1R3BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C1H1R3CA01# |  |
|        |               |         | 1.4pF  | ±0.05pF | GRM1885C1H1R4WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C1H1R4BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C1H1R4CA01# |  |
|        |               |         | 1.5pF  | ±0.05pF | GRM1885C1H1R5WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C1H1R5BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C1H1R5CA01# |  |
|        |               |         | 1.6pF  | ±0.05pF | GRM1885C1H1R6WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C1H1R6BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C1H1R6CA01# |  |
|        |               |         | 1.7pF  | ±0.05pF | GRM1885C1H1R7WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C1H1R7BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C1H1R7CA01# |  |
|        |               |         | 1.8pF  | ±0.05pF | GRM1885C1H1R8WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C1H1R8BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C1H1R8CA01# |  |
|        |               |         | 1.9pF  | ±0.05pF | GRM1885C1H1R9WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C1H1R9BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C1H1R9CA01# |  |
|        |               |         | 2.0pF  | ±0.05pF | GRM1885C1H2R0WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C1H2R0BA01# |  |
|        |               |         |        | ±0.25pF | GRM1885C1H2R0CA01# |  |
|        |               |         | 2.1pF  | ±0.05pF | GRM1885C1H2R1WA01# |  |
|        |               |         |        | ±0.1pF  | GRM1885C1H2R1BA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.6×0.8mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |                    |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--------------------|--|
| 0.9mm  | 50Vdc         | COG     | 2.1pF | ±0.25pF | GRM1885C1H2R1CA01# |  | 0.9mm  | 50Vdc         | COG     | 3.9pF | ±0.25pF | GRM1885C1H3R9CA01# |                    |  |
|        |               |         |       | ±0.05pF | GRM1885C1H2R2WA01# |  |        |               |         |       | 4.0pF   | ±0.05pF            | GRM1885C1H4R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H2R2BA01# |  |        |               |         |       |         | ±0.1pF             | GRM1885C1H4R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H2R2CA01# |  |        |               |         |       |         | ±0.25pF            | GRM1885C1H4R0CA01# |  |
|        |               |         | 2.3pF | ±0.05pF | GRM1885C1H2R3WA01# |  |        |               |         | 4.1pF |         | ±0.05pF            | GRM1885C1H4R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H2R3BA01# |  |        |               |         |       | ±0.1pF  | GRM1885C1H4R1BA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C1H2R3CA01# |  |        |               |         |       | ±0.25pF | GRM1885C1H4R1CA01# |                    |  |
|        |               |         | 2.4pF | ±0.05pF | GRM1885C1H2R4WA01# |  |        |               |         | 4.2pF | ±0.05pF | GRM1885C1H4R2WA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H2R4BA01# |  |        |               |         |       | ±0.1pF  | GRM1885C1H4R2BA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C1H2R4CA01# |  |        |               |         |       | ±0.25pF | GRM1885C1H4R2CA01# |                    |  |
|        |               |         | 2.5pF | ±0.05pF | GRM1885C1H2R5WA01# |  |        |               |         | 4.3pF | ±0.05pF | GRM1885C1H4R3WA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H2R5BA01# |  |        |               |         |       | ±0.1pF  | GRM1885C1H4R3BA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C1H2R5CA01# |  |        |               |         |       | ±0.25pF | GRM1885C1H4R3CA01# |                    |  |
|        |               |         | 2.6pF | ±0.05pF | GRM1885C1H2R6WA01# |  |        |               |         | 4.4pF | ±0.05pF | GRM1885C1H4R4WA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H2R6BA01# |  |        |               |         |       | ±0.1pF  | GRM1885C1H4R4BA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C1H2R6CA01# |  |        |               |         |       | ±0.25pF | GRM1885C1H4R4CA01# |                    |  |
|        |               |         | 2.7pF | ±0.05pF | GRM1885C1H2R7WA01# |  |        |               |         | 4.5pF | ±0.05pF | GRM1885C1H4R5WA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H2R7BA01# |  |        |               |         |       | ±0.1pF  | GRM1885C1H4R5BA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C1H2R7CA01# |  |        |               |         |       | ±0.25pF | GRM1885C1H4R5CA01# |                    |  |
|        |               |         | 2.8pF | ±0.05pF | GRM1885C1H2R8WA01# |  |        |               |         | 4.6pF | ±0.05pF | GRM1885C1H4R6WA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H2R8BA01# |  |        |               |         |       | ±0.1pF  | GRM1885C1H4R6BA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C1H2R8CA01# |  |        |               |         |       | ±0.25pF | GRM1885C1H4R6CA01# |                    |  |
|        |               |         | 2.9pF | ±0.05pF | GRM1885C1H2R9WA01# |  |        |               |         | 4.7pF | ±0.05pF | GRM1885C1H4R7WA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H2R9BA01# |  |        |               |         |       | ±0.1pF  | GRM1885C1H4R7BA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C1H2R9CA01# |  |        |               |         |       | ±0.25pF | GRM1885C1H4R7CA01# |                    |  |
|        |               |         | 3.0pF | ±0.05pF | GRM1885C1H3R0WA01# |  |        |               |         | 4.8pF | ±0.05pF | GRM1885C1H4R8WA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H3R0BA01# |  |        |               |         |       | ±0.1pF  | GRM1885C1H4R8BA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C1H3R0CA01# |  |        |               |         |       | ±0.25pF | GRM1885C1H4R8CA01# |                    |  |
|        |               |         | 3.1pF | ±0.05pF | GRM1885C1H3R1WA01# |  |        |               |         | 4.9pF | ±0.05pF | GRM1885C1H4R9WA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H3R1BA01# |  |        |               |         |       | ±0.1pF  | GRM1885C1H4R9BA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C1H3R1CA01# |  |        |               |         |       | ±0.25pF | GRM1885C1H4R9CA01# |                    |  |
|        |               |         | 3.2pF | ±0.05pF | GRM1885C1H3R2WA01# |  |        |               |         | 5.0pF | ±0.05pF | GRM1885C1H5R0WA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H3R2BA01# |  |        |               |         |       | ±0.1pF  | GRM1885C1H5R0BA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C1H3R2CA01# |  |        |               |         |       | ±0.25pF | GRM1885C1H5R0CA01# |                    |  |
|        |               |         | 3.3pF | ±0.05pF | GRM1885C1H3R3WA01# |  |        |               |         | 5.1pF | ±0.05pF | GRM1885C1H5R1WA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H3R3BA01# |  |        |               |         |       | ±0.1pF  | GRM1885C1H5R1BA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C1H3R3CA01# |  |        |               |         |       | ±0.25pF | GRM1885C1H5R1CA01# |                    |  |
|        |               |         | 3.4pF | ±0.05pF | GRM1885C1H3R4WA01# |  |        |               |         | 5.2pF | ±0.05pF | GRM1885C1H5R2WA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H3R4BA01# |  |        |               |         |       | ±0.1pF  | GRM1885C1H5R2BA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C1H3R4CA01# |  |        |               |         |       | ±0.25pF | GRM1885C1H5R2CA01# |                    |  |
|        |               |         | 3.5pF | ±0.05pF | GRM1885C1H3R5WA01# |  |        |               |         | 5.3pF | ±0.05pF | GRM1885C1H5R3WA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H3R5BA01# |  |        |               |         |       | ±0.1pF  | GRM1885C1H5R3BA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C1H3R5CA01# |  |        |               |         |       | ±0.25pF | GRM1885C1H5R3CA01# |                    |  |
|        |               |         | 3.6pF | ±0.05pF | GRM1885C1H3R6WA01# |  |        |               |         | 5.4pF | ±0.05pF | GRM1885C1H5R4WA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H3R6BA01# |  |        |               |         |       | ±0.1pF  | GRM1885C1H5R4BA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C1H3R6CA01# |  |        |               |         |       | ±0.25pF | GRM1885C1H5R4CA01# |                    |  |
|        |               |         | 3.7pF | ±0.05pF | GRM1885C1H3R7WA01# |  |        |               |         | 5.5pF | ±0.05pF | GRM1885C1H5R5WA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H3R7BA01# |  |        |               |         |       | ±0.1pF  | GRM1885C1H5R5BA01# |                    |  |
|        |               |         |       | ±0.25pF | GRM1885C1H3R7CA01# |  |        |               |         |       | ±0.25pF | GRM1885C1H5R5CA01# |                    |  |
|        |               |         | 3.8pF | ±0.05pF | GRM1885C1H3R8WA01# |  |        |               |         |       | ±0.5pF  | GRM1885C1H5R4DA01# |                    |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H3R8BA01# |  |        |               |         |       | 5.5pF   | ±0.05pF            | GRM1885C1H5R5WA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H3R8CA01# |  |        |               |         |       |         | ±0.1pF             | GRM1885C1H5R5BA01# |  |
|        |               |         | 3.9pF | ±0.05pF | GRM1885C1H3R9WA01# |  |        |               |         |       |         | ±0.25pF            | GRM1885C1H5R5CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H3R9BA01# |  |        |               |         |       | ±0.5pF  | GRM1885C1H5R5DA01# |                    |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.6×0.8mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.9mm  | 50Vdc         | COG     | 5.6pF | ±0.05pF | GRM1885C1H5R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H5R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H5R6CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H5R6DA01# |  |
|        |               |         | 5.7pF | ±0.05pF | GRM1885C1H5R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H5R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H5R7CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H5R7DA01# |  |
|        |               |         | 5.8pF | ±0.05pF | GRM1885C1H5R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H5R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H5R8CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H5R8DA01# |  |
|        |               |         | 5.9pF | ±0.05pF | GRM1885C1H5R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H5R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H5R9CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H5R9DA01# |  |
|        |               |         | 6.0pF | ±0.05pF | GRM1885C1H6R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H6R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H6R0CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H6R0DA01# |  |
|        |               |         | 6.1pF | ±0.05pF | GRM1885C1H6R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H6R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H6R1CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H6R1DA01# |  |
|        |               |         | 6.2pF | ±0.05pF | GRM1885C1H6R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H6R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H6R2CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H6R2DA01# |  |
|        |               |         | 6.3pF | ±0.05pF | GRM1885C1H6R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H6R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H6R3CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H6R3DA01# |  |
|        |               |         | 6.4pF | ±0.05pF | GRM1885C1H6R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H6R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H6R4CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H6R4DA01# |  |
|        |               |         | 6.5pF | ±0.05pF | GRM1885C1H6R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H6R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H6R5CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H6R5DA01# |  |
|        |               |         | 6.6pF | ±0.05pF | GRM1885C1H6R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H6R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H6R6CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H6R6DA01# |  |
|        |               |         | 6.7pF | ±0.05pF | GRM1885C1H6R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H6R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H6R7CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H6R7DA01# |  |
|        |               |         | 6.8pF | ±0.05pF | GRM1885C1H6R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H6R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H6R8CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H6R8DA01# |  |
|        |               |         | 6.9pF | ±0.05pF | GRM1885C1H6R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H6R9BA01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.9mm  | 50Vdc         | COG     | 6.9pF | ±0.25pF | GRM1885C1H6R9CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H6R9DA01# |  |
|        |               |         | 7.0pF | ±0.05pF | GRM1885C1H7R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H7R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H7R0CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H7R0DA01# |  |
|        |               |         | 7.1pF | ±0.05pF | GRM1885C1H7R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H7R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H7R1CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H7R1DA01# |  |
|        |               |         | 7.2pF | ±0.05pF | GRM1885C1H7R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H7R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H7R2CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H7R2DA01# |  |
|        |               |         | 7.3pF | ±0.05pF | GRM1885C1H7R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H7R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H7R3CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H7R3DA01# |  |
|        |               |         | 7.4pF | ±0.05pF | GRM1885C1H7R4WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H7R4BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H7R4CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H7R4DA01# |  |
|        |               |         | 7.5pF | ±0.05pF | GRM1885C1H7R5WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H7R5BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H7R5CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H7R5DA01# |  |
|        |               |         | 7.6pF | ±0.05pF | GRM1885C1H7R6WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H7R6BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H7R6CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H7R6DA01# |  |
|        |               |         | 7.7pF | ±0.05pF | GRM1885C1H7R7WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H7R7BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H7R7CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H7R7DA01# |  |
|        |               |         | 7.8pF | ±0.05pF | GRM1885C1H7R8WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H7R8BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H7R8CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H7R8DA01# |  |
|        |               |         | 7.9pF | ±0.05pF | GRM1885C1H7R9WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H7R9BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H7R9CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H7R9DA01# |  |
|        |               |         | 8.0pF | ±0.05pF | GRM1885C1H8R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H8R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H8R0CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H8R0DA01# |  |
|        |               |         | 8.1pF | ±0.05pF | GRM1885C1H8R1WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H8R1BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H8R1CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H8R1DA01# |  |
|        |               |         | 8.2pF | ±0.05pF | GRM1885C1H8R2WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H8R2BA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H8R2CA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H8R2DA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.6×0.8mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.    | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|---------|---------|--------------------|--|
| 0.9mm  | 50Vdc         | COG     | 8.3pF | ±0.05pF | GRM1885C1H8R3WA01# |  | 0.9mm  | 50Vdc         | COG     | 9.6pF   | ±0.25pF | GRM1885C1H9R6CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H8R3BA01# |  |        |               |         |         | ±0.5pF  | GRM1885C1H9R6DA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H8R3CA01# |  |        |               |         | 9.7pF   | ±0.05pF | GRM1885C1H9R7WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H8R3DA01# |  |        |               |         |         | ±0.1pF  | GRM1885C1H9R7BA01# |  |
|        |               |         | 8.4pF | ±0.05pF | GRM1885C1H8R4WA01# |  |        |               |         |         | ±0.25pF | GRM1885C1H9R7CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H8R4BA01# |  |        |               |         |         | ±0.5pF  | GRM1885C1H9R7DA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H8R4CA01# |  |        |               |         | 9.8pF   | ±0.05pF | GRM1885C1H9R8WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H8R4DA01# |  |        |               |         |         | ±0.1pF  | GRM1885C1H9R8BA01# |  |
|        |               |         | 8.5pF | ±0.05pF | GRM1885C1H8R5WA01# |  |        |               |         |         | ±0.25pF | GRM1885C1H9R8CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H8R5BA01# |  |        |               |         |         | ±0.5pF  | GRM1885C1H9R8DA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H8R5CA01# |  |        |               |         | 9.9pF   | ±0.05pF | GRM1885C1H9R9WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H8R5DA01# |  |        |               |         |         | ±0.1pF  | GRM1885C1H9R9BA01# |  |
|        |               |         | 8.6pF | ±0.05pF | GRM1885C1H8R6WA01# |  |        |               |         |         | ±0.25pF | GRM1885C1H9R9CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H8R6BA01# |  |        |               |         |         | ±0.5pF  | GRM1885C1H9R9DA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H8R6CA01# |  |        |               |         | 10pF    | ±5%     | GRM1885C1H100JA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H8R6DA01# |  |        |               |         | 12pF    | ±5%     | GRM1885C1H120JA01# |  |
|        |               |         | 8.7pF | ±0.05pF | GRM1885C1H8R7WA01# |  |        |               |         | 15pF    | ±5%     | GRM1885C1H150JA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H8R7BA01# |  |        |               |         | 18pF    | ±5%     | GRM1885C1H180JA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H8R7CA01# |  |        |               |         | 22pF    | ±5%     | GRM1885C1H220JA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H8R7DA01# |  |        |               |         | 27pF    | ±5%     | GRM1885C1H270JA01# |  |
|        |               |         | 8.8pF | ±0.05pF | GRM1885C1H8R8WA01# |  |        |               |         | 33pF    | ±5%     | GRM1885C1H330JA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H8R8BA01# |  |        |               |         | 39pF    | ±5%     | GRM1885C1H390JA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H8R8CA01# |  |        |               |         | 47pF    | ±5%     | GRM1885C1H470JA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H8R8DA01# |  |        |               |         | 56pF    | ±5%     | GRM1885C1H560JA01# |  |
|        |               |         | 8.9pF | ±0.05pF | GRM1885C1H8R9WA01# |  |        |               |         | 68pF    | ±5%     | GRM1885C1H680JA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H8R9BA01# |  |        |               |         | 82pF    | ±5%     | GRM1885C1H820JA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H8R9CA01# |  |        |               |         | 100pF   | ±5%     | GRM1885C1H101JA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H8R9DA01# |  |        |               |         | 120pF   | ±5%     | GRM1885C1H121JA01# |  |
|        |               |         | 9.0pF | ±0.05pF | GRM1885C1H9R0WA01# |  |        |               |         | 150pF   | ±5%     | GRM1885C1H151JA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H9R0BA01# |  |        |               |         | 180pF   | ±5%     | GRM1885C1H181JA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H9R0CA01# |  |        |               |         | 220pF   | ±5%     | GRM1885C1H221JA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H9R0DA01# |  |        |               |         | 270pF   | ±5%     | GRM1885C1H271JA01# |  |
|        |               |         | 9.1pF | ±0.05pF | GRM1885C1H9R1WA01# |  |        |               |         | 330pF   | ±5%     | GRM1885C1H331JA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H9R1BA01# |  |        |               |         | 390pF   | ±5%     | GRM1885C1H391JA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H9R1CA01# |  |        |               |         | 470pF   | ±5%     | GRM1885C1H471JA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H9R1DA01# |  |        |               |         | 560pF   | ±5%     | GRM1885C1H561JA01# |  |
|        |               |         | 9.2pF | ±0.05pF | GRM1885C1H9R2WA01# |  |        |               |         | 680pF   | ±5%     | GRM1885C1H681JA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H9R2BA01# |  |        |               |         | 820pF   | ±5%     | GRM1885C1H821JA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H9R2CA01# |  |        |               |         | 1000pF  | ±5%     | GRM1885C1H102JA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H9R2DA01# |  |        |               |         | 1200pF  | ±5%     | GRM1885C1H122JA01# |  |
|        |               |         | 9.3pF | ±0.05pF | GRM1885C1H9R3WA01# |  |        |               |         | 1500pF  | ±5%     | GRM1885C1H152JA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H9R3BA01# |  |        |               |         | 1800pF  | ±5%     | GRM1885C1H182JA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H9R3CA01# |  |        |               |         | 2200pF  | ±5%     | GRM1885C1H222JA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H9R3DA01# |  |        |               |         | 2700pF  | ±5%     | GRM1885C1H272JA01# |  |
|        |               |         | 9.4pF | ±0.05pF | GRM1885C1H9R4WA01# |  |        |               |         | 3300pF  | ±5%     | GRM1885C1H332JA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H9R4BA01# |  |        |               |         | 3900pF  | ±5%     | GRM1885C1H392JA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H9R4CA01# |  |        |               |         | 4700pF  | ±5%     | GRM1885C1H472JA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H9R4DA01# |  |        |               |         | 5600pF  | ±5%     | GRM1885C1H562JA01# |  |
|        |               |         | 9.5pF | ±0.05pF | GRM1885C1H9R5WA01# |  |        |               |         | 6800pF  | ±5%     | GRM1885C1H682JA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H9R5BA01# |  |        |               |         | 8200pF  | ±5%     | GRM1885C1H822JA01# |  |
|        |               |         |       | ±0.25pF | GRM1885C1H9R5CA01# |  |        |               |         | 10000pF | ±5%     | GRM1885C1H103JA01# |  |
|        |               |         |       | ±0.5pF  | GRM1885C1H9R5DA01# |  |        |               | CK      | 0.50pF  | ±0.05pF | GRM1884C1HR50WA01# |  |
|        |               |         | 9.6pF | ±0.05pF | GRM1885C1H9R6WA01# |  |        |               |         |         | ±0.1pF  | GRM1884C1HR50BA01# |  |
|        |               |         |       | ±0.1pF  | GRM1885C1H9R6BA01# |  |        |               |         | 0.60pF  | ±0.05pF | GRM1884C1HR60WA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.6×0.8mm)

| T max. | Rated Voltage | TC Code | Cap.    | Tol.               | Part Number        |         | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |                    |
|--------|---------------|---------|---------|--------------------|--------------------|---------|--------|---------------|---------|-------|---------|--------------------|--------------------|
| 0.9mm  | 50Vdc         | CK      | 0.60pF  | ±0.1pF             | GRM1884C1HR60BA01# |         | 0.9mm  | 50Vdc         | CJ      | 2.5pF | ±0.25pF | GRM1883C1H2R5CA01# |                    |
|        |               |         |         | ±0.05pF            | GRM1884C1HR70WA01# |         |        |               |         |       | 2.6pF   | ±0.05pF            | GRM1883C1H2R6WA01# |
|        |               |         | ±0.1pF  | GRM1884C1HR70BA01# |                    | ±0.1pF  |        |               |         |       |         | GRM1883C1H2R6BA01# |                    |
|        |               |         | ±0.25pF | GRM1884C1HR80WA01# |                    | ±0.25pF |        |               |         |       |         | GRM1883C1H2R6CA01# |                    |
|        |               |         | 0.80pF  | ±0.05pF            | GRM1884C1HR80BA01# |         |        |               |         | 2.7pF | ±0.05pF | GRM1883C1H2R7WA01# |                    |
|        |               |         |         | ±0.1pF             | GRM1884C1HR90WA01# |         |        |               |         |       | ±0.1pF  | GRM1883C1H2R7BA01# |                    |
|        |               |         | 0.90pF  | ±0.05pF            | GRM1884C1HR90BA01# |         |        |               |         |       | ±0.25pF | GRM1883C1H2R7CA01# |                    |
|        |               |         |         | ±0.1pF             | GRM1884C1H1R0WA01# |         |        |               |         | 2.8pF | ±0.05pF | GRM1883C1H2R8WA01# |                    |
|        |               |         | 1.0pF   | ±0.05pF            | GRM1884C1H1R0BA01# |         |        |               |         |       | ±0.1pF  | GRM1883C1H2R8BA01# |                    |
|        |               |         |         | ±0.1pF             | GRM1884C1H1R0CA01# |         |        |               |         |       | ±0.25pF | GRM1883C1H2R8CA01# |                    |
|        |               |         |         | ±0.25pF            | GRM1884C1H1R1WA01# |         |        |               |         | 2.9pF | ±0.05pF | GRM1883C1H2R9WA01# |                    |
|        |               |         | 1.1pF   | ±0.05pF            | GRM1884C1H1R1BA01# |         |        |               |         |       | ±0.1pF  | GRM1883C1H2R9BA01# |                    |
|        |               |         |         | ±0.1pF             | GRM1884C1H1R1CA01# |         |        |               |         |       | ±0.25pF | GRM1883C1H2R9CA01# |                    |
|        |               |         |         | ±0.25pF            | GRM1884C1H1R2WA01# |         |        |               |         | 3.0pF | ±0.05pF | GRM1883C1H3R0WA01# |                    |
|        |               |         | 1.2pF   | ±0.05pF            | GRM1884C1H1R2BA01# |         |        |               |         |       | ±0.1pF  | GRM1883C1H3R0BA01# |                    |
|        |               |         |         | ±0.1pF             | GRM1884C1H1R2CA01# |         |        |               |         |       | ±0.25pF | GRM1883C1H3R0CA01# |                    |
|        |               |         |         | ±0.25pF            | GRM1884C1H1R3WA01# |         |        |               |         | 3.1pF | ±0.05pF | GRM1883C1H3R1WA01# |                    |
|        |               |         | 1.3pF   | ±0.05pF            | GRM1884C1H1R3BA01# |         |        |               |         |       | ±0.1pF  | GRM1883C1H3R1BA01# |                    |
|        |               |         |         | ±0.1pF             | GRM1884C1H1R3CA01# |         |        |               |         |       | ±0.25pF | GRM1883C1H3R1CA01# |                    |
|        |               |         |         | ±0.25pF            | GRM1884C1H1R4WA01# |         |        |               |         | 3.2pF | ±0.05pF | GRM1883C1H3R2WA01# |                    |
|        |               |         | 1.4pF   | ±0.05pF            | GRM1884C1H1R4BA01# |         |        |               |         |       | ±0.1pF  | GRM1883C1H3R2BA01# |                    |
|        |               |         |         | ±0.1pF             | GRM1884C1H1R4CA01# |         |        |               |         |       | ±0.25pF | GRM1883C1H3R2CA01# |                    |
|        |               |         |         | ±0.25pF            | GRM1884C1H1R5WA01# |         |        |               |         | 3.3pF | ±0.05pF | GRM1883C1H3R3WA01# |                    |
|        |               |         | 1.5pF   | ±0.05pF            | GRM1884C1H1R5BA01# |         |        |               |         |       | ±0.1pF  | GRM1883C1H3R3BA01# |                    |
|        |               |         |         | ±0.1pF             | GRM1884C1H1R5CA01# |         |        |               |         |       | ±0.25pF | GRM1883C1H3R3CA01# |                    |
|        |               |         |         | ±0.25pF            | GRM1884C1H1R6WA01# |         |        |               |         | 3.4pF | ±0.05pF | GRM1883C1H3R4WA01# |                    |
|        |               |         | 1.6pF   | ±0.05pF            | GRM1884C1H1R6BA01# |         |        |               |         |       | ±0.1pF  | GRM1883C1H3R4BA01# |                    |
|        |               |         |         | ±0.1pF             | GRM1884C1H1R6CA01# |         |        |               |         |       | ±0.25pF | GRM1883C1H3R4CA01# |                    |
|        |               |         |         | ±0.25pF            | GRM1884C1H1R7WA01# |         |        |               |         | 3.5pF | ±0.05pF | GRM1883C1H3R5WA01# |                    |
|        |               |         | 1.7pF   | ±0.05pF            | GRM1884C1H1R7BA01# |         |        |               |         |       | ±0.1pF  | GRM1883C1H3R5BA01# |                    |
|        |               |         |         | ±0.1pF             | GRM1884C1H1R7CA01# |         |        |               |         |       | ±0.25pF | GRM1883C1H3R5CA01# |                    |
|        |               |         |         | ±0.25pF            | GRM1884C1H1R8WA01# |         |        |               |         | 3.6pF | ±0.05pF | GRM1883C1H3R6WA01# |                    |
|        |               |         | 1.8pF   | ±0.05pF            | GRM1884C1H1R8BA01# |         |        |               |         |       | ±0.1pF  | GRM1883C1H3R6BA01# |                    |
|        |               |         |         | ±0.1pF             | GRM1884C1H1R8CA01# |         |        |               |         |       | ±0.25pF | GRM1883C1H3R6CA01# |                    |
|        |               |         |         | ±0.25pF            | GRM1884C1H1R9WA01# |         |        |               |         | 3.7pF | ±0.05pF | GRM1883C1H3R7WA01# |                    |
|        |               |         | 1.9pF   | ±0.05pF            | GRM1884C1H1R9BA01# |         |        |               |         |       | ±0.1pF  | GRM1883C1H3R7BA01# |                    |
|        |               |         |         | ±0.1pF             | GRM1884C1H1R9CA01# |         |        |               |         |       | ±0.25pF | GRM1883C1H3R7CA01# |                    |
|        |               |         |         | ±0.25pF            | GRM1884C1H2R0WA01# |         |        |               |         | 3.8pF | ±0.05pF | GRM1883C1H3R8WA01# |                    |
|        |               |         | 2.0pF   | ±0.05pF            | GRM1884C1H2R0BA01# |         |        |               |         |       | ±0.1pF  | GRM1883C1H3R8BA01# |                    |
|        |               |         |         | ±0.1pF             | GRM1884C1H2R0CA01# |         |        |               |         |       | ±0.25pF | GRM1883C1H3R8CA01# |                    |
|        |               |         |         | ±0.25pF            | GRM1884C1H2R1WA01# |         |        |               |         | 3.9pF | ±0.05pF | GRM1883C1H3R9WA01# |                    |
|        |               | CJ      | 2.1pF   | ±0.05pF            | GRM1883C1H2R1BA01# |         |        |               |         |       | ±0.1pF  | GRM1883C1H3R9BA01# |                    |
|        |               |         |         | ±0.1pF             | GRM1883C1H2R1CA01# |         |        |               |         |       | ±0.25pF | GRM1883C1H3R9CA01# |                    |
|        |               |         |         | ±0.25pF            | GRM1883C1H2R2WA01# |         |        |               | CH      | 4.0pF | ±0.05pF | GRM1882C1H4R0WA01# |                    |
|        |               |         | 2.2pF   | ±0.05pF            | GRM1883C1H2R2BA01# |         |        |               |         |       | ±0.1pF  | GRM1882C1H4R0BA01# |                    |
|        |               |         |         | ±0.1pF             | GRM1883C1H2R2CA01# |         |        |               |         |       | ±0.25pF | GRM1882C1H4R0CA01# |                    |
|        |               |         |         | ±0.25pF            | GRM1883C1H2R3WA01# |         |        |               |         | 4.1pF | ±0.05pF | GRM1882C1H4R1WA01# |                    |
|        |               |         | 2.3pF   | ±0.05pF            | GRM1883C1H2R3BA01# |         |        |               |         |       | ±0.1pF  | GRM1882C1H4R1BA01# |                    |
|        |               |         |         | ±0.1pF             | GRM1883C1H2R3CA01# |         |        |               |         |       | ±0.25pF | GRM1882C1H4R1CA01# |                    |
|        |               |         |         | ±0.25pF            | GRM1883C1H2R4WA01# |         |        |               |         | 4.2pF | ±0.05pF | GRM1882C1H4R2WA01# |                    |
|        |               |         | 2.4pF   | ±0.05pF            | GRM1883C1H2R4BA01# |         |        |               |         |       | ±0.1pF  | GRM1882C1H4R2BA01# |                    |
|        |               |         |         | ±0.1pF             | GRM1883C1H2R4CA01# |         |        |               |         |       | ±0.25pF | GRM1882C1H4R2CA01# |                    |
|        |               |         |         | ±0.25pF            | GRM1883C1H2R5WA01# |         |        |               |         | 4.3pF | ±0.05pF | GRM1882C1H4R3WA01# |                    |
|        |               |         | 2.5pF   | ±0.05pF            | GRM1883C1H2R5BA01# |         |        |               |         |       | ±0.1pF  | GRM1882C1H4R3BA01# |                    |
|        |               |         |         | ±0.1pF             | GRM1883C1H2R5CA01# |         |        |               |         |       |         |                    |                    |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.6×0.8mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 0.9mm  | 50Vdc         | CH      | 4.3pF | ±0.25pF | GRM1882C1H4R3CA01# |  | 0.9mm  | 50Vdc         | CH      | 5.9pF | ±0.05pF | GRM1882C1H5R9WA01# |  |
|        |               |         |       | ±0.05pF | GRM1882C1H4R4WA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H5R9BA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H4R4BA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H5R9CA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H4R4CA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H5R9DA01# |  |
|        |               |         | 4.5pF | ±0.05pF | GRM1882C1H4R5WA01# |  |        |               |         | 6.0pF | ±0.05pF | GRM1882C1H6R0WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H4R5BA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H6R0BA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H4R5CA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H6R0CA01# |  |
|        |               |         | 4.6pF | ±0.05pF | GRM1882C1H4R6WA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H6R0DA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H4R6BA01# |  |        |               |         | 6.1pF | ±0.05pF | GRM1882C1H6R1WA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H4R6CA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H6R1BA01# |  |
|        |               |         | 4.7pF | ±0.05pF | GRM1882C1H4R7WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H6R1CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H4R7BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H6R1DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H4R7CA01# |  |        |               |         | 6.2pF | ±0.05pF | GRM1882C1H6R2WA01# |  |
|        |               |         | 4.8pF | ±0.05pF | GRM1882C1H4R8WA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H6R2BA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H4R8BA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H6R2CA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H4R8CA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H6R2DA01# |  |
|        |               |         | 4.9pF | ±0.05pF | GRM1882C1H4R9WA01# |  |        |               |         | 6.3pF | ±0.05pF | GRM1882C1H6R3WA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H4R9BA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H6R3BA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H4R9CA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H6R3CA01# |  |
|        |               |         | 5.0pF | ±0.05pF | GRM1882C1H5R0WA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H6R3DA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H5R0BA01# |  |        |               |         | 6.4pF | ±0.05pF | GRM1882C1H6R4WA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H5R0CA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H6R4BA01# |  |
|        |               |         | 5.1pF | ±0.05pF | GRM1882C1H5R1WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H6R4CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H5R1BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H6R4DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H5R1CA01# |  |        |               |         | 6.5pF | ±0.05pF | GRM1882C1H6R5WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H5R1DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H6R5BA01# |  |
|        |               |         | 5.2pF | ±0.05pF | GRM1882C1H5R2WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H6R5CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H5R2BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H6R5DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H5R2CA01# |  |        |               |         | 6.6pF | ±0.05pF | GRM1882C1H6R6WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H5R2DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H6R6BA01# |  |
|        |               |         | 5.3pF | ±0.05pF | GRM1882C1H5R3WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H6R6CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H5R3BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H6R6DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H5R3CA01# |  |        |               |         | 6.7pF | ±0.05pF | GRM1882C1H6R7WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H5R3DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H6R7BA01# |  |
|        |               |         | 5.4pF | ±0.05pF | GRM1882C1H5R4WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H6R7CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H5R4BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H6R7DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H5R4CA01# |  |        |               |         | 6.8pF | ±0.05pF | GRM1882C1H6R8WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H5R4DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H6R8BA01# |  |
|        |               |         | 5.5pF | ±0.05pF | GRM1882C1H5R5WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H6R8CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H5R5BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H6R8DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H5R5CA01# |  |        |               |         | 6.9pF | ±0.05pF | GRM1882C1H6R9WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H5R5DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H6R9BA01# |  |
|        |               |         | 5.6pF | ±0.05pF | GRM1882C1H5R6WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H6R9CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H5R6BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H6R9DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H5R6CA01# |  |        |               |         | 7.0pF | ±0.05pF | GRM1882C1H7R0WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H5R6DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H7R0BA01# |  |
|        |               |         | 5.7pF | ±0.05pF | GRM1882C1H5R7WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H7R0CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H5R7BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H7R0DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H5R7CA01# |  |        |               |         | 7.1pF | ±0.05pF | GRM1882C1H7R1WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H5R7DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H7R1BA01# |  |
|        |               |         | 5.8pF | ±0.05pF | GRM1882C1H5R8WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H7R1CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H5R8BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H7R1DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H5R8CA01# |  |        |               |         | 7.2pF | ±0.05pF | GRM1882C1H7R2WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H5R8DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H7R2BA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.6×0.8mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 0.9mm  | 50Vdc         | CH      | 7.2pF | ±0.25pF | GRM1882C1H7R2CA01# |  | 0.9mm  | 50Vdc         | CH      | 8.6pF | ±0.05pF | GRM1882C1H8R6WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H7R2DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H8R6BA01# |  |
|        |               |         | 7.3pF | ±0.05pF | GRM1882C1H7R3WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H8R6CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H7R3BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H8R6DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H7R3CA01# |  |        |               |         | 8.7pF | ±0.05pF | GRM1882C1H8R7WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H7R3DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H8R7BA01# |  |
|        |               |         | 7.4pF | ±0.05pF | GRM1882C1H7R4WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H8R7CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H7R4BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H8R7DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H7R4CA01# |  |        |               |         | 8.8pF | ±0.05pF | GRM1882C1H8R8WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H7R4DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H8R8BA01# |  |
|        |               |         | 7.5pF | ±0.05pF | GRM1882C1H7R5WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H8R8CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H7R5BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H8R8DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H7R5CA01# |  |        |               |         | 8.9pF | ±0.05pF | GRM1882C1H8R9WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H7R5DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H8R9BA01# |  |
|        |               |         | 7.6pF | ±0.05pF | GRM1882C1H7R6WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H8R9CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H7R6BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H8R9DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H7R6CA01# |  |        |               |         | 9.0pF | ±0.05pF | GRM1882C1H9R0WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H7R6DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H9R0BA01# |  |
|        |               |         | 7.7pF | ±0.05pF | GRM1882C1H7R7WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H9R0CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H7R7BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H9R0DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H7R7CA01# |  |        |               |         | 9.1pF | ±0.05pF | GRM1882C1H9R1WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H7R7DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H9R1BA01# |  |
|        |               |         | 7.8pF | ±0.05pF | GRM1882C1H7R8WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H9R1CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H7R8BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H9R1DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H7R8CA01# |  |        |               |         | 9.2pF | ±0.05pF | GRM1882C1H9R2WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H7R8DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H9R2BA01# |  |
|        |               |         | 7.9pF | ±0.05pF | GRM1882C1H7R9WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H9R2CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H7R9BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H9R2DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H7R9CA01# |  |        |               |         | 9.3pF | ±0.05pF | GRM1882C1H9R3WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H7R9DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H9R3BA01# |  |
|        |               |         | 8.0pF | ±0.05pF | GRM1882C1H8R0WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H9R3CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H8R0BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H9R3DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H8R0CA01# |  |        |               |         | 9.4pF | ±0.05pF | GRM1882C1H9R4WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H8R0DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H9R4BA01# |  |
|        |               |         | 8.1pF | ±0.05pF | GRM1882C1H8R1WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H9R4CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H8R1BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H9R4DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H8R1CA01# |  |        |               |         | 9.5pF | ±0.05pF | GRM1882C1H9R5WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H8R1DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H9R5BA01# |  |
|        |               |         | 8.2pF | ±0.05pF | GRM1882C1H8R2WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H9R5CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H8R2BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H9R5DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H8R2CA01# |  |        |               |         | 9.6pF | ±0.05pF | GRM1882C1H9R6WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H8R2DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H9R6BA01# |  |
|        |               |         | 8.3pF | ±0.05pF | GRM1882C1H8R3WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H9R6CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H8R3BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H9R6DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H8R3CA01# |  |        |               |         | 9.7pF | ±0.05pF | GRM1882C1H9R7WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H8R3DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H9R7BA01# |  |
|        |               |         | 8.4pF | ±0.05pF | GRM1882C1H8R4WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H9R7CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H8R4BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H9R7DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H8R4CA01# |  |        |               |         | 9.8pF | ±0.05pF | GRM1882C1H9R8WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H8R4DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H9R8BA01# |  |
|        |               |         | 8.5pF | ±0.05pF | GRM1882C1H8R5WA01# |  |        |               |         |       | ±0.25pF | GRM1882C1H9R8CA01# |  |
|        |               |         |       | ±0.1pF  | GRM1882C1H8R5BA01# |  |        |               |         |       | ±0.5pF  | GRM1882C1H9R8DA01# |  |
|        |               |         |       | ±0.25pF | GRM1882C1H8R5CA01# |  |        |               |         | 9.9pF | ±0.05pF | GRM1882C1H9R9WA01# |  |
|        |               |         |       | ±0.5pF  | GRM1882C1H8R5DA01# |  |        |               |         |       | ±0.1pF  | GRM1882C1H9R9BA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 1.6×0.8mm)

| T max. | Rated Voltage | TC Code | Cap.    | Tol.    | Part Number        |  |
|--------|---------------|---------|---------|---------|--------------------|--|
| 0.9mm  | 50Vdc         | CH      | 9.9pF   | ±0.25pF | GRM1882C1H9R9CA01# |  |
|        |               |         |         | ±0.5pF  | GRM1882C1H9R9DA01# |  |
|        |               |         | 10pF    | ±5%     | GRM1882C1H100JA01# |  |
|        |               |         | 12pF    | ±5%     | GRM1882C1H120JA01# |  |
|        |               |         | 15pF    | ±5%     | GRM1882C1H150JA01# |  |
|        |               |         | 18pF    | ±5%     | GRM1882C1H180JA01# |  |
|        |               |         | 22pF    | ±5%     | GRM1882C1H220JA01# |  |
|        |               |         | 27pF    | ±5%     | GRM1882C1H270JA01# |  |
|        |               |         | 33pF    | ±5%     | GRM1882C1H330JA01# |  |
|        |               |         | 39pF    | ±5%     | GRM1882C1H390JA01# |  |
|        |               |         | 47pF    | ±5%     | GRM1882C1H470JA01# |  |
|        |               |         | 56pF    | ±5%     | GRM1882C1H560JA01# |  |
|        |               |         | 68pF    | ±5%     | GRM1882C1H680JA01# |  |
|        |               |         | 82pF    | ±5%     | GRM1882C1H820JA01# |  |
|        |               |         | 100pF   | ±5%     | GRM1882C1H101JA01# |  |
|        |               |         | 120pF   | ±5%     | GRM1882C1H121JA01# |  |
|        |               |         | 150pF   | ±5%     | GRM1882C1H151JA01# |  |
|        |               |         | 180pF   | ±5%     | GRM1882C1H181JA01# |  |
|        |               |         | 220pF   | ±5%     | GRM1882C1H221JA01# |  |
|        |               |         | 270pF   | ±5%     | GRM1882C1H271JA01# |  |
|        |               |         | 330pF   | ±5%     | GRM1882C1H331JA01# |  |
|        |               |         | 390pF   | ±5%     | GRM1882C1H391JA01# |  |
|        |               |         | 470pF   | ±5%     | GRM1882C1H471JA01# |  |
|        |               |         | 560pF   | ±5%     | GRM1882C1H561JA01# |  |
|        |               |         | 680pF   | ±5%     | GRM1882C1H681JA01# |  |
|        |               |         | 820pF   | ±5%     | GRM1882C1H821JA01# |  |
|        |               |         | 1000pF  | ±5%     | GRM1882C1H102JA01# |  |
|        |               |         | 1200pF  | ±5%     | GRM1882C1H122JA01# |  |
|        |               |         | 1500pF  | ±5%     | GRM1882C1H152JA01# |  |
|        |               |         | 1800pF  | ±5%     | GRM1882C1H182JA01# |  |
|        |               |         | 2200pF  | ±5%     | GRM1882C1H222JA01# |  |
|        |               |         | 2700pF  | ±5%     | GRM1882C1H272JA01# |  |
|        |               |         | 3300pF  | ±5%     | GRM1882C1H332JA01# |  |
|        |               |         | 3900pF  | ±5%     | GRM1882C1H392JA01# |  |
|        |               |         | 4700pF  | ±5%     | GRM1882C1H472JA01# |  |
|        |               |         | 5600pF  | ±5%     | GRM1882C1H562JA01# |  |
|        |               |         | 6800pF  | ±5%     | GRM1882C1H682JA01# |  |
|        |               |         | 8200pF  | ±5%     | GRM1882C1H822JA01# |  |
|        |               |         | 10000pF | ±5%     | GRM1882C1H103JA01# |  |
|        |               | SL      | 1200pF  | ±5%     | GRM1881X1H122JA01# |  |
|        |               |         |         | ±5%     | GRM1881X1H152JA01# |  |
|        |               |         |         | ±5%     | GRM1881X1H182JA01# |  |
|        |               |         |         | ±5%     | GRM1881X1H222JA01# |  |
|        |               |         |         | ±5%     | GRM1881X1H272JA01# |  |
|        |               |         |         | ±5%     | GRM1881X1H332JA01# |  |
|        |               |         |         | ±5%     | GRM1881X1H392JA01# |  |
|        |               |         |         | ±5%     | GRM1881X1H472JA01# |  |
|        |               |         |         | ±5%     | GRM1881X1H562JA01# |  |
|        |               |         |         | ±5%     | GRM1881X1H682JA01# |  |
|        |               |         |         | ±5%     | GRM1881X1H822JA01# |  |
|        |               |         |         | ±5%     | GRM1881X1H103JA01# |  |
|        |               | U2J     | 1200pF  | ±5%     | GRM1887U1H122JA01# |  |
|        |               |         |         | ±5%     | GRM1887U1H152JA01# |  |
|        |               |         |         | ±5%     | GRM1887U1H182JA01# |  |
|        |               |         |         | ±5%     | GRM1887U1H182JA01# |  |

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 0.9mm  | 50Vdc         | U2J     | 2200pF  | ±5%  | GRM1887U1H222JA01# |  |
|        |               |         | 2700pF  | ±5%  | GRM1887U1H272JA01# |  |
|        |               |         | 3300pF  | ±5%  | GRM1887U1H332JA01# |  |
|        |               |         | 3900pF  | ±5%  | GRM1887U1H392JA01# |  |
|        |               |         | 4700pF  | ±5%  | GRM1887U1H472JA01# |  |
|        |               |         | 5600pF  | ±5%  | GRM1887U1H562JA01# |  |
|        |               |         | 6800pF  | ±5%  | GRM1887U1H682JA01# |  |
|        |               |         | 8200pF  | ±5%  | GRM1887U1H822JA01# |  |
|        |               |         | 10000pF | ±5%  | GRM1887U1H103JA01# |  |
|        |               |         | 1000pF  | ±5%  | GRM1883U1H102JA01# |  |
|        |               | UJ      | 1200pF  | ±5%  | GRM1883U1H122JA01# |  |
|        |               |         | 1500pF  | ±5%  | GRM1883U1H152JA01# |  |
|        |               |         | 1800pF  | ±5%  | GRM1883U1H182JA01# |  |
|        |               |         | 2200pF  | ±5%  | GRM1883U1H222JA01# |  |
|        |               |         | 2700pF  | ±5%  | GRM1883U1H272JA01# |  |
|        |               |         | 3300pF  | ±5%  | GRM1883U1H332JA01# |  |
|        |               |         | 3900pF  | ±5%  | GRM1883U1H392JA01# |  |
|        |               |         | 4700pF  | ±5%  | GRM1883U1H472JA01# |  |
|        |               |         | 5600pF  | ±5%  | GRM1883U1H562JA01# |  |
|        |               |         | 6800pF  | ±5%  | GRM1883U1H682JA01# |  |
|        |               |         | 8200pF  | ±5%  | GRM1883U1H822JA01# |  |
|        |               |         | 10000pF | ±5%  | GRM1883U1H103JA01# |  |
|        | 10Vdc         | SL      | 12000pF | ±5%  | GRM1881X1A123JA01# |  |
|        |               |         | 15000pF | ±5%  | GRM1881X1A153JA01# |  |
|        |               |         | 18000pF | ±5%  | GRM1881X1A183JA01# |  |
|        |               |         | 22000pF | ±5%  | GRM1881X1A223JA01# |  |
|        |               | U2J     | 12000pF | ±5%  | GRM1887U1A123JA01# |  |
|        |               |         | 15000pF | ±5%  | GRM1887U1A153JA01# |  |
|        |               |         | 18000pF | ±5%  | GRM1887U1A183JA01# |  |
|        |               |         | 22000pF | ±5%  | GRM1887U1A223JA01# |  |
|        |               | UJ      | 12000pF | ±5%  | GRM1883U1A123JA01# |  |
|        |               |         | 15000pF | ±5%  | GRM1883U1A153JA01# |  |
|        |               |         | 18000pF | ±5%  | GRM1883U1A183JA01# |  |
|        |               |         | 22000pF | ±5%  | GRM1883U1A223JA01# |  |

2.0×1.25mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |  |
|--------|---------------|---------|--------|------|--------------------|--|
| 0.7mm  | 100Vdc        | COG     | 100pF  | ±5%  | GRM2165C2A101JA01# |  |
|        |               |         | 120pF  | ±5%  | GRM2165C2A121JA01# |  |
|        |               |         | 150pF  | ±5%  | GRM2165C2A151JA01# |  |
|        |               |         | 180pF  | ±5%  | GRM2165C2A181JA01# |  |
|        |               |         | 220pF  | ±5%  | GRM2165C2A221JA01# |  |
|        |               |         | 270pF  | ±5%  | GRM2165C2A271JA01# |  |
|        |               |         | 330pF  | ±5%  | GRM2165C2A331JA01# |  |
|        |               |         | 390pF  | ±5%  | GRM2165C2A391JA01# |  |
|        |               |         | 470pF  | ±5%  | GRM2165C2A471JA01# |  |
|        |               |         | 560pF  | ±5%  | GRM2165C2A561JA01# |  |
|        |               |         | 680pF  | ±5%  | GRM2165C2A681JA01# |  |
|        |               |         | 820pF  | ±5%  | GRM2165C2A821JA01# |  |
|        |               |         | 1000pF | ±5%  | GRM2165C2A102JA01# |  |
|        |               |         | 1200pF | ±5%  | GRM2165C2A122JA01# |  |
|        |               |         | 1500pF | ±5%  | GRM2165C2A152JA01# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 2.0×1.25mm)

| T max. | Rated Voltage | TC Code | Cap.    | Tol.               | Part Number        |                    | T max. | Rated Voltage | TC Code            | Cap.               | Tol.               | Part Number        |                    |                    |  |
|--------|---------------|---------|---------|--------------------|--------------------|--------------------|--------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--|
| 0.7mm  | 100Vdc        | COG     | 1800pF  | ±5%                | GRM2165C2A182JA01# |                    | 0.95mm | 50Vdc         | COG                | 15000pF            | ±5%                | GRM2195C1H153JA01# |                    |                    |  |
|        |               |         | 2200pF  | ±5%                | GRM2165C2A222JA01# |                    |        |               |                    | CH                 | 5600pF             | ±5%                | GRM2192C1H562JA01# |                    |  |
|        |               |         | 2700pF  | ±5%                | GRM2165C2A272JA01# |                    |        |               |                    |                    | 6800pF             | ±5%                | GRM2192C1H682JA01# |                    |  |
|        |               |         | 3300pF  | ±5%                | GRM2165C2A332JA01# |                    |        |               |                    |                    | 8200pF             | ±5%                | GRM2192C1H822JA01# |                    |  |
|        |               | CH      | 100pF   | ±5%                | GRM2162C2A101JA01# |                    |        |               | 10000pF            |                    | ±5%                | GRM2192C1H103JA01# |                    |                    |  |
|        |               |         | 120pF   | ±5%                | GRM2162C2A121JA01# |                    |        |               | 12000pF            | ±5%                | GRM2192C1H123JA01# |                    |                    |                    |  |
|        |               |         | 150pF   | ±5%                | GRM2162C2A151JA01# |                    |        |               | 15000pF            | ±5%                | GRM2192C1H153JA01# |                    |                    |                    |  |
|        |               |         | 180pF   | ±5%                | GRM2162C2A181JA01# |                    |        |               | SL                 | 22000pF            | ±5%                | GRM2191X1H223JA01# |                    |                    |  |
|        |               |         | 220pF   | ±5%                | GRM2162C2A221JA01# |                    |        |               |                    | 27000pF            | ±5%                | GRM2191X1H273JA01# |                    |                    |  |
|        |               |         | 270pF   | ±5%                | GRM2162C2A271JA01# |                    |        |               | U2J                | 22000pF            | ±5%                | GRM2197U1H223JA01# |                    |                    |  |
|        |               |         | 330pF   | ±5%                | GRM2162C2A331JA01# |                    |        |               |                    | 27000pF            | ±5%                | GRM2197U1H273JA01# |                    |                    |  |
|        |               |         | 390pF   | ±5%                | GRM2162C2A391JA01# |                    |        |               | UJ                 | 22000pF            | ±5%                | GRM2193U1H223JA01# |                    |                    |  |
|        |               |         | 470pF   | ±5%                | GRM2162C2A471JA01# |                    |        |               |                    | 27000pF            | ±5%                | GRM2193U1H273JA01# |                    |                    |  |
|        |               |         | 560pF   | ±5%                | GRM2162C2A561JA01# |                    |        |               | 10Vdc              | SL                 | 56000pF            | ±5%                | GRM2191X1A563JA01# |                    |  |
|        |               |         | 680pF   | ±5%                | GRM2162C2A681JA01# |                    |        |               |                    |                    | U2J                | 56000pF            | ±5%                | GRM2197U1A563JA01# |  |
|        |               |         | 820pF   | ±5%                | GRM2162C2A821JA01# |                    |        |               |                    |                    | UJ                 | 56000pF            | ±5%                | GRM2193U1A563JA01# |  |
|        |               | 1000pF  | ±5%     | GRM2162C2A102JA01# |                    | 250Vdc             |        | COG           |                    | 10pF               | ±5%                | GRM21A5C2E100JW01# |                    |                    |  |
|        |               | 1200pF  | ±5%     | GRM2162C2A122JA01# |                    |                    |        |               | 12pF               | ±5%                | GRM21A5C2E120JW01# |                    |                    |                    |  |
|        |               | 1500pF  | ±5%     | GRM2162C2A152JA01# |                    |                    |        |               | 15pF               | ±5%                | GRM21A5C2E150JW01# |                    |                    |                    |  |
|        |               | 1800pF  | ±5%     | GRM2162C2A182JA01# |                    |                    |        |               | 18pF               | ±5%                | GRM21A5C2E180JW01# |                    |                    |                    |  |
|        |               | 2200pF  | ±5%     | GRM2162C2A222JA01# |                    |                    |        |               | 22pF               | ±5%                | GRM21A5C2E220JW01# |                    |                    |                    |  |
|        |               | 2700pF  | ±5%     | GRM2162C2A272JA01# |                    |                    |        |               | 27pF               | ±5%                | GRM21A5C2E270JW01# |                    |                    |                    |  |
|        |               | 3300pF  | ±5%     | GRM2162C2A332JA01# |                    |                    |        |               | 33pF               | ±5%                | GRM21A5C2E330JW01# |                    |                    |                    |  |
|        |               | 50Vdc   | COG     | 1200pF             | ±5%                |                    |        |               | GRM2165C1H122JA01# |                    | 39pF               | ±5%                | GRM21A5C2E390JW01# |                    |  |
|        |               |         |         | 1500pF             | ±5%                |                    |        |               | GRM2165C1H152JA01# |                    | 47pF               | ±5%                | GRM21A5C2E470JW01# |                    |  |
|        |               |         |         | 1800pF             | ±5%                |                    |        |               | GRM2165C1H182JA01# |                    | 56pF               | ±5%                | GRM21A5C2E560JW01# |                    |  |
|        |               |         |         | 2200pF             | ±5%                |                    |        |               | GRM2165C1H222JA01# |                    | 68pF               | ±5%                | GRM21A5C2E680JW01# |                    |  |
|        |               |         |         | 2700pF             | ±5%                |                    |        |               | GRM2165C1H272JA01# |                    | 82pF               | ±5%                | GRM21A5C2E820JW01# |                    |  |
|        |               |         |         | 3300pF             | ±5%                |                    |        |               | GRM2165C1H332JA01# |                    | 100pF              | ±5%                | GRM21A5C2E101JW01# |                    |  |
|        |               |         |         | 3900pF             | ±5%                | GRM2165C1H392JA01# |        |               |                    | 120pF              | ±5%                | GRM21A5C2E121JW01# |                    |                    |  |
|        |               |         |         | 4700pF             | ±5%                | GRM2165C1H472JA01# |        |               |                    | 150pF              | ±5%                | GRM21A5C2E151JW01# |                    |                    |  |
|        |               |         | CH      | 1200pF             | ±5%                | GRM2162C1H122JA01# |        |               |                    | 180pF              | ±5%                | GRM21A5C2E181JW01# |                    |                    |  |
|        | 1500pF        |         |         | ±5%                | GRM2162C1H152JA01# |                    | 220pF  |               | ±5%                | GRM21A5C2E221JW01# |                    |                    |                    |                    |  |
|        | 1800pF        |         |         | ±5%                | GRM2162C1H182JA01# |                    | 270pF  |               | ±5%                | GRM21A5C2E271JW01# |                    |                    |                    |                    |  |
|        | 2200pF        |         |         | ±5%                | GRM2162C1H222JA01# |                    | 330pF  |               | ±5%                | GRM21A5C2E331JW01# |                    |                    |                    |                    |  |
|        | 2700pF        |         |         | ±5%                | GRM2162C1H272JA01# |                    | 390pF  |               | ±5%                | GRM21A5C2E391JWA1# |                    |                    |                    |                    |  |
|        | 3300pF        |         |         | ±5%                | GRM2162C1H332JA01# |                    | 470pF  |               | ±5%                | GRM21A5C2E471JWA1# |                    |                    |                    |                    |  |
|        | 3900pF        |         |         | ±5%                | GRM2162C1H392JA01# |                    | 560pF  |               | ±5%                | GRM21A5C2E561JWA1# |                    |                    |                    |                    |  |
|        | 4700pF        |         |         | ±5%                | GRM2162C1H472JA01# |                    | 680pF  |               | ±5%                | GRM21A5C2E681JWA1# |                    |                    |                    |                    |  |
|        | SL            | 12000pF | ±5%     | GRM2161X1H123JA01# |                    | 820pF              | ±5%    |               | GRM21A5C2E821JWA1# |                    |                    |                    |                    |                    |  |
|        |               | 15000pF | ±5%     | GRM2161X1H153JA01# |                    | 1000pF             | ±5%    |               | GRM21A5C2E102JWA1# |                    |                    |                    |                    |                    |  |
|        |               | 18000pF | ±5%     | GRM2161X1H183JA01# |                    | 1200pF             | ±5%    |               | GRM21A5C2E122JWA1# |                    |                    |                    |                    |                    |  |
|        | U2J           | 12000pF | ±5%     | GRM2167U1H123JA01# |                    | 1500pF             | ±5%    |               | GRM21A5C2E152JWA1# |                    |                    |                    |                    |                    |  |
|        |               | 15000pF | ±5%     | GRM2167U1H153JA01# |                    | 1800pF             | ±5%    |               | GRM21A5C2E182JWA1# |                    |                    |                    |                    |                    |  |
|        |               | 18000pF | ±5%     | GRM2167U1H183JA01# |                    | 2200pF             | ±5%    |               | GRM21A5C2E222JWA1# |                    |                    |                    |                    |                    |  |
|        | UJ            | 10000pF | ±5%     | GRM2163U1H103JA01# |                    | 2700pF             | ±5%    |               | GRM21A5C2E272JWA1# |                    |                    |                    |                    |                    |  |
|        |               | 12000pF | ±5%     | GRM2163U1H123JA01# |                    | U2J                | 100pF  | ±5%           | GRM21A7U2E101JW31# |                    |                    |                    |                    |                    |  |
|        |               | 15000pF | ±5%     | GRM2163U1H153JA01# |                    |                    | 120pF  | ±5%           | GRM21A7U2E121JW31# |                    |                    |                    |                    |                    |  |
|        |               | 18000pF | ±5%     | GRM2163U1H183JA01# |                    |                    | 150pF  | ±5%           | GRM21A7U2E151JW31# |                    |                    |                    |                    |                    |  |
| 0.95mm | 50Vdc         | COG     | 5600pF  | ±5%                | GRM2195C1H562JA01# |                    |        | 180pF         | ±5%                | GRM21A7U2E181JW31# |                    |                    |                    |                    |  |
|        |               |         | 6800pF  | ±5%                | GRM2195C1H682JA01# |                    |        | 220pF         | ±5%                | GRM21A7U2E221JW31# |                    |                    |                    |                    |  |
|        |               |         | 8200pF  | ±5%                | GRM2195C1H822JA01# |                    |        | 270pF         | ±5%                | GRM21A7U2E271JW31# |                    |                    |                    |                    |  |
|        |               |         | 10000pF | ±5%                | GRM2195C1H103JA01# |                    |        | 330pF         | ±5%                | GRM21A7U2E331JW31# |                    |                    |                    |                    |  |
|        |               |         | 12000pF | ±5%                | GRM2195C1H123JA01# |                    |        | 390pF         | ±5%                | GRM21A7U2E391JW31# |                    |                    |                    |                    |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 2.0×1.25mm)

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 1.0mm  | 250Vdc        | U2J     | 470pF   | ±5%  | GRM21A7U2E471JW31# |  |
|        |               |         | 560pF   | ±5%  | GRM21A7U2E561JW31# |  |
|        |               |         | 680pF   | ±5%  | GRM21A7U2E681JW31# |  |
|        |               |         | 820pF   | ±5%  | GRM21A7U2E821JW31# |  |
|        |               |         | 1000pF  | ±5%  | GRM21A7U2E102JW31# |  |
|        |               |         | 1200pF  | ±5%  | GRM21A7U2E122JW31# |  |
|        |               |         | 1500pF  | ±5%  | GRM21A7U2E152JW31# |  |
|        |               |         | 1800pF  | ±5%  | GRM21A7U2E182JW31# |  |
|        |               |         | 2200pF  | ±5%  | GRM21A7U2E222JW31# |  |
|        |               |         |         |      |                    |  |
|        | 200Vdc        | COG     | 10pF    | ±5%  | GRM21A5C2D100JW01# |  |
|        |               |         | 12pF    | ±5%  | GRM21A5C2D120JW01# |  |
|        |               |         | 15pF    | ±5%  | GRM21A5C2D150JW01# |  |
|        |               |         | 18pF    | ±5%  | GRM21A5C2D180JW01# |  |
|        |               |         | 22pF    | ±5%  | GRM21A5C2D220JW01# |  |
|        |               |         | 27pF    | ±5%  | GRM21A5C2D270JW01# |  |
|        |               |         | 33pF    | ±5%  | GRM21A5C2D330JW01# |  |
|        |               |         | 39pF    | ±5%  | GRM21A5C2D390JW01# |  |
|        |               |         | 47pF    | ±5%  | GRM21A5C2D470JW01# |  |
|        |               |         | 56pF    | ±5%  | GRM21A5C2D560JW01# |  |
|        |               | U2J     | 68pF    | ±5%  | GRM21A5C2D680JW01# |  |
|        |               |         | 82pF    | ±5%  | GRM21A5C2D820JW01# |  |
|        |               |         | 100pF   | ±5%  | GRM21A5C2D101JW01# |  |
|        |               |         | 120pF   | ±5%  | GRM21A5C2D121JW01# |  |
|        |               |         | 150pF   | ±5%  | GRM21A5C2D151JW01# |  |
|        |               |         | 180pF   | ±5%  | GRM21A5C2D181JW01# |  |
|        |               |         | 220pF   | ±5%  | GRM21A5C2D221JW01# |  |
|        |               |         | 270pF   | ±5%  | GRM21A5C2D271JW01# |  |
|        |               |         | 330pF   | ±5%  | GRM21A5C2D331JW01# |  |
|        |               |         |         |      |                    |  |
|        |               | U2J     | 100pF   | ±5%  | GRM21A7U2D101JW31# |  |
|        |               |         | 120pF   | ±5%  | GRM21A7U2D121JW31# |  |
|        |               |         | 150pF   | ±5%  | GRM21A7U2D151JW31# |  |
|        |               |         | 180pF   | ±5%  | GRM21A7U2D181JW31# |  |
|        |               |         | 220pF   | ±5%  | GRM21A7U2D221JW31# |  |
|        |               |         | 270pF   | ±5%  | GRM21A7U2D271JW31# |  |
|        |               |         | 330pF   | ±5%  | GRM21A7U2D331JW31# |  |
|        |               |         | 390pF   | ±5%  | GRM21A7U2D391JW31# |  |
|        |               |         | 470pF   | ±5%  | GRM21A7U2D471JW31# |  |
|        |               |         | 560pF   | ±5%  | GRM21A7U2D561JW31# |  |
|        |               |         | 680pF   | ±5%  | GRM21A7U2D681JW31# |  |
|        |               |         | 820pF   | ±5%  | GRM21A7U2D821JW31# |  |
|        |               |         | 1000pF  | ±5%  | GRM21A7U2D102JW31# |  |
|        |               |         | 1200pF  | ±5%  | GRM21A7U2D122JW31# |  |
|        |               |         | 1500pF  | ±5%  | GRM21A7U2D152JW31# |  |
|        |               |         | 1800pF  | ±5%  | GRM21A7U2D182JW31# |  |
|        |               |         | 2200pF  | ±5%  | GRM21A7U2D222JW31# |  |
|        |               |         |         |      |                    |  |
|        | 50Vdc         | SL      | 33000pF | ±5%  | GRM21A1X1H333JA39# |  |
|        |               | U2J     | 33000pF | ±5%  | GRM21A7U1H333JA39# |  |
|        |               | UJ      | 33000pF | ±5%  | GRM21A3U1H333JA39# |  |
| 1.35mm | 50Vdc         | COG     | 18000pF | ±5%  | GRM21B5C1H183JA01# |  |
|        |               |         | 22000pF | ±5%  | GRM21B5C1H223JA01# |  |
|        |               | CH      | 18000pF | ±5%  | GRM21B2C1H183JA01# |  |
|        |               |         | 22000pF | ±5%  | GRM21B2C1H223JA01# |  |
|        |               | SL      | 39000pF | ±5%  | GRM21B1X1H393JA01# |  |
|        |               |         | 47000pF | ±5%  | GRM21B1X1H473JA01# |  |

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 1.35mm | 50Vdc         | U2J     | 39000pF | ±5%  | GRM21B7U1H393JA01# |  |
|        |               |         | 47000pF | ±5%  | GRM21B7U1H473JA01# |  |
|        |               | UJ      | 39000pF | ±5%  | GRM21B3U1H393JA01# |  |
|        |               |         | 47000pF | ±5%  | GRM21B3U1H473JA01# |  |
|        | 10Vdc         | SL      | 68000pF | ±5%  | GRM21B1X1A683JA01# |  |
|        |               |         | 82000pF | ±5%  | GRM21B1X1A823JA01# |  |
|        |               |         | 0.10μF  | ±5%  | GRM21B1X1A104JA01# |  |
|        |               | U2J     | 68000pF | ±5%  | GRM21B7U1A683JA01# |  |
|        |               |         | 82000pF | ±5%  | GRM21B7U1A823JA01# |  |
|        |               |         | 0.10μF  | ±5%  | GRM21B7U1A104JA01# |  |
|        |               | UJ      | 68000pF | ±5%  | GRM21B3U1A683JA01# |  |
|        |               |         | 82000pF | ±5%  | GRM21B3U1A823JA01# |  |
|        |               |         | 0.10μF  | ±5%  | GRM21B3U1A104JA01# |  |
| 1.45mm | 250Vdc        | COG     | 3300pF  | ±5%  | GRM21B5C2E332JWA1# |  |
|        |               |         | 3900pF  | ±5%  | GRM21B5C2E392JWA1# |  |
|        |               |         | 4700pF  | ±5%  | GRM21B5C2E472JWA1# |  |
|        |               | U2J     | 2700pF  | ±5%  | GRM21B7U2E272JW32# |  |
|        |               |         | 3300pF  | ±5%  | GRM21B7U2E332JW32# |  |
|        |               |         | 3900pF  | ±5%  | GRM21B7U2E392JW32# |  |
|        | 200Vdc        | U2J     | 4700pF  | ±5%  | GRM21B7U2E472JW32# |  |
|        |               |         | 5600pF  | ±5%  | GRM21B7U2E562JW32# |  |
|        |               |         |         |      |                    |  |
|        |               | U2J     | 2700pF  | ±5%  | GRM21B7U2D272JW32# |  |
|        |               |         | 3300pF  | ±5%  | GRM21B7U2D332JW32# |  |
|        |               |         | 3900pF  | ±5%  | GRM21B7U2D392JW32# |  |
|        |               |         | 4700pF  | ±5%  | GRM21B7U2D472JW32# |  |
|        |               |         | 5600pF  | ±5%  | GRM21B7U2D562JW32# |  |

3.2×1.6mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |    |
|--------|---------------|---------|---------|------|--------------------|----|
| 0.95mm | 100Vdc        | COG     | 1800pF  | ±5%  | GRM3195C2A182JA01# |    |
|        |               |         | 2200pF  | ±5%  | GRM3195C2A222JA01# |    |
|        |               |         | 2700pF  | ±5%  | GRM3195C2A272JA01# |    |
|        |               |         | 3300pF  | ±5%  | GRM3195C2A332JA01# |    |
|        |               |         | 3900pF  | ±5%  | GRM3195C2A392JA01# |    |
|        |               |         | 4700pF  | ±5%  | GRM3195C2A472JA01# |    |
|        |               |         | 5600pF  | ±5%  | GRM3195C2A562JA01# |    |
|        |               |         | 6800pF  | ±5%  | GRM3195C2A682JA01# |    |
|        |               |         | 8200pF  | ±5%  | GRM3195C2A822JA01# |    |
|        |               |         | 10000pF | ±5%  | GRM3195C2A103JA01# |    |
|        |               |         | 12000pF | ±5%  | GRM3195C2A123JA01# |    |
|        |               |         | 15000pF | ±5%  | GRM3195C2A153JA01# |    |
|        |               |         | 18000pF | ±5%  | GRM3195C2A183JA01# |    |
|        |               |         | 22000pF | ±5%  | GRM3195C2A223JA01# |    |
|        |               |         | 27000pF | ±5%  | GRM3195C2A273JA01# | D1 |
|        |               |         | 33000pF | ±5%  | GRM3195C2A333JA01# | D1 |
|        |               |         | 39000pF | ±5%  | GRM3195C2A393JA01# | D1 |
|        |               | CH      | 1800pF  | ±5%  | GRM3192C2A182JA01# |    |
|        |               |         | 2200pF  | ±5%  | GRM3192C2A222JA01# |    |
|        |               |         | 2700pF  | ±5%  | GRM3192C2A272JA01# |    |
|        |               |         | 3300pF  | ±5%  | GRM3192C2A332JA01# |    |
|        |               |         | 3900pF  | ±5%  | GRM3192C2A392JA01# |    |
|        |               |         | 4700pF  | ±5%  | GRM3192C2A472JA01# |    |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 3.2×1.6mm)

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |    |
|--------|---------------|---------|---------|------|--------------------|----|
| 0.95mm | 100Vdc        | CH      | 5600pF  | ±5%  | GRM3192C2A562JA01# |    |
|        |               |         | 6800pF  | ±5%  | GRM3192C2A682JA01# |    |
|        |               |         | 8200pF  | ±5%  | GRM3192C2A822JA01# |    |
|        |               |         | 10000pF | ±5%  | GRM3192C2A103JA01# |    |
|        |               |         | 12000pF | ±5%  | GRM3192C2A123JA01# |    |
|        |               |         | 15000pF | ±5%  | GRM3192C2A153JA01# |    |
|        |               |         | 18000pF | ±5%  | GRM3192C2A183JA01# |    |
|        |               |         | 22000pF | ±5%  | GRM3192C2A223JA01# |    |
|        |               |         | 27000pF | ±5%  | GRM3192C2A273JA01# | D1 |
|        |               |         | 33000pF | ±5%  | GRM3192C2A333JA01# | D1 |
|        |               |         | 39000pF | ±5%  | GRM3192C2A393JA01# | D1 |
|        | 50Vdc         | COG     | 12000pF | ±5%  | GRM3195C1H123JA01# |    |
|        |               |         | 15000pF | ±5%  | GRM3195C1H153JA01# |    |
|        |               |         | 18000pF | ±5%  | GRM3195C1H183JA01# |    |
|        |               |         | 22000pF | ±5%  | GRM3195C1H223JA01# |    |
|        |               |         | 27000pF | ±5%  | GRM3195C1H273JA01# |    |
|        |               |         | 33000pF | ±5%  | GRM3195C1H333JA01# |    |
|        |               |         | 39000pF | ±5%  | GRM3195C1H393JA01# |    |
|        |               | CH      | 12000pF | ±5%  | GRM3192C1H123JA01# |    |
|        |               |         | 15000pF | ±5%  | GRM3192C1H153JA01# |    |
|        |               |         | 18000pF | ±5%  | GRM3192C1H183JA01# |    |
|        |               |         | 22000pF | ±5%  | GRM3192C1H223JA01# |    |
|        |               |         | 27000pF | ±5%  | GRM3192C1H273JA01# |    |
|        |               |         | 33000pF | ±5%  | GRM3192C1H333JA01# |    |
|        |               | SL      | 56000pF | ±5%  | GRM3191X1H563JA01# |    |
|        |               |         | 56000pF | ±5%  | GRM3197U1H563JA01# |    |
|        |               |         | 56000pF | ±5%  | GRM3193U1H563JA01# |    |
| 1.0mm  | 2000Vdc       | U2J     | 10pF    | ±5%  | GRM31A7U3D100JW31# |    |
|        |               |         | 12pF    | ±5%  | GRM31A7U3D120JW31# |    |
|        |               |         | 15pF    | ±5%  | GRM31A7U3D150JW31# |    |
|        |               |         | 18pF    | ±5%  | GRM31A7U3D180JW31# |    |
|        |               |         | 22pF    | ±5%  | GRM31A7U3D220JW31# |    |
|        |               |         | 27pF    | ±5%  | GRM31A7U3D270JW31# |    |
|        |               |         | 33pF    | ±5%  | GRM31A7U3D330JW31# |    |
|        |               |         | 39pF    | ±5%  | GRM31A7U3D390JW31# |    |
|        |               |         | 47pF    | ±5%  | GRM31A7U3D470JW31# |    |
|        |               |         | 56pF    | ±5%  | GRM31A7U3D560JW31# |    |
|        |               |         | 68pF    | ±5%  | GRM31A7U3D680JW31# |    |
|        | 1000Vdc       | COG     | 10pF    | ±5%  | GRM31A5C3A100JW01# |    |
|        |               |         | 12pF    | ±5%  | GRM31A5C3A120JW01# |    |
|        |               |         | 15pF    | ±5%  | GRM31A5C3A150JW01# |    |
|        |               |         | 18pF    | ±5%  | GRM31A5C3A180JW01# |    |
|        |               |         | 22pF    | ±5%  | GRM31A5C3A220JW01# |    |
|        |               |         | 27pF    | ±5%  | GRM31A5C3A270JW01# |    |
|        |               |         | 33pF    | ±5%  | GRM31A5C3A330JW01# |    |
|        |               |         | 39pF    | ±5%  | GRM31A5C3A390JW01# |    |
|        |               |         | 47pF    | ±5%  | GRM31A5C3A470JW01# |    |
|        |               |         | 56pF    | ±5%  | GRM31A5C3A560JW01# |    |
|        |               |         | 68pF    | ±5%  | GRM31A5C3A680JW01# |    |
|        |               |         | 82pF    | ±5%  | GRM31A5C3A820JW01# |    |
|        |               |         | 100pF   | ±5%  | GRM31A5C3A101JW01# |    |
|        |               |         | 120pF   | ±5%  | GRM31A5C3A121JW01# |    |
|        |               |         | 150pF   | ±5%  | GRM31A5C3A151JW01# |    |

| T max. | Rated Voltage | TC Code            | Cap.               | Tol. | Part Number        |     |
|--------|---------------|--------------------|--------------------|------|--------------------|-----|
| 1.0mm  | 1000Vdc       | COG                | 180pF              | ±5%  | GRM31A5C3A181JW01# |     |
|        |               |                    | 220pF              | ±5%  | GRM31A5C3A221JW01# |     |
|        |               |                    | 270pF              | ±5%  | GRM31A5C3A271JWA1# |     |
|        |               |                    | 330pF              | ±5%  | GRM31A5C3A331JWA1# |     |
|        |               |                    | 390pF              | ±5%  | GRM31A5C3A391JWA1# |     |
|        |               |                    | 470pF              | ±5%  | GRM31A5C3A471JWA1# |     |
|        |               | U2J                | 10pF               | ±5%  | GRM31A7U3A100JW31# |     |
|        |               |                    | 12pF               | ±5%  | GRM31A7U3A120JW31# |     |
|        |               |                    | 15pF               | ±5%  | GRM31A7U3A150JW31# |     |
|        |               |                    | 18pF               | ±5%  | GRM31A7U3A180JW31# |     |
|        |               |                    | 22pF               | ±5%  | GRM31A7U3A220JW31# |     |
|        |               |                    | 27pF               | ±5%  | GRM31A7U3A270JW31# |     |
|        |               |                    | 33pF               | ±5%  | GRM31A7U3A330JW31# |     |
|        |               |                    | 39pF               | ±5%  | GRM31A7U3A390JW31# |     |
|        |               |                    | 47pF               | ±5%  | GRM31A7U3A470JW31# |     |
|        |               |                    | 56pF               | ±5%  | GRM31A7U3A560JW31# |     |
|        |               |                    | 68pF               | ±5%  | GRM31A7U3A680JW31# |     |
|        |               |                    | 82pF               | ±5%  | GRM31A7U3A820JW31# |     |
|        |               |                    | 100pF              | ±5%  | GRM31A7U3A101JW31# |     |
|        |               |                    | 120pF              | ±5%  | GRM31A7U3A121JW31# |     |
|        |               |                    | 150pF              | ±5%  | GRM31A7U3A151JW31# |     |
|        |               |                    | 180pF              | ±5%  | GRM31A7U3A181JW31# |     |
|        |               |                    | 220pF              | ±5%  | GRM31A7U3A221JW31# |     |
|        |               |                    | 270pF              | ±5%  | GRM31A7U3A271JW31# |     |
|        |               |                    | 330pF              | ±5%  | GRM31A7U3A331JW31# |     |
|        |               |                    | 630Vdc             | COG  | 10pF               | ±5% |
|        | 12pF          | ±5%                |                    |      | GRM31A5C2J120JW01# |     |
|        | 15pF          | ±5%                |                    |      | GRM31A5C2J150JW01# |     |
|        | 18pF          | ±5%                |                    |      | GRM31A5C2J180JW01# |     |
|        | 22pF          | ±5%                |                    |      | GRM31A5C2J220JW01# |     |
|        | 27pF          | ±5%                |                    |      | GRM31A5C2J270JW01# |     |
|        | 33pF          | ±5%                |                    |      | GRM31A5C2J330JW01# |     |
|        | 39pF          | ±5%                |                    |      | GRM31A5C2J390JW01# |     |
|        | 47pF          | ±5%                |                    |      | GRM31A5C2J470JW01# |     |
|        | 56pF          | ±5%                |                    |      | GRM31A5C2J560JW01# |     |
|        | 68pF          | ±5%                |                    |      | GRM31A5C2J680JW01# |     |
|        | 82pF          | ±5%                |                    |      | GRM31A5C2J820JW01# |     |
|        | 100pF         | ±5%                |                    |      | GRM31A5C2J101JW01# |     |
|        | 120pF         | ±5%                |                    |      | GRM31A5C2J121JW01# |     |
|        | 150pF         | ±5%                |                    |      | GRM31A5C2J151JW01# |     |
|        | 180pF         | ±5%                |                    |      | GRM31A5C2J181JW01# |     |
|        | 220pF         | ±5%                |                    |      | GRM31A5C2J221JW01# |     |
|        | 270pF         | ±5%                |                    |      | GRM31A5C2J271JW01# |     |
|        | 330pF         | ±5%                |                    |      | GRM31A5C2J331JW01# |     |
|        | 390pF         | ±5%                |                    |      | GRM31A5C2J391JW01# |     |
|        | 470pF         | ±5%                |                    |      | GRM31A5C2J471JW01# |     |
|        | 560pF         | ±5%                | GRM31A5C2J561JW01# |      |                    |     |
| 1200pF | ±5%           | GRM31A5C2J122JWA1# |                    |      |                    |     |
| 1500pF | ±5%           | GRM31A5C2J152JWA1# |                    |      |                    |     |
| 1800pF | ±5%           | GRM31A5C2J182JWA1# |                    |      |                    |     |
| U2J    | 10pF          | ±5%                | GRM31A7U2J100JW31# |      |                    |     |
|        | 12pF          | ±5%                | GRM31A7U2J120JW31# |      |                    |     |
|        | 15pF          | ±5%                | GRM31A7U2J150JW31# |      |                    |     |
|        | 18pF          | ±5%                | GRM31A7U2J180JW31# |      |                    |     |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 3.2×1.6mm)

| T max. | Rated Voltage | TC Code | Cap.               | Tol.               | Part Number        |        | T max. | Rated Voltage      | TC Code | Cap.               | Tol.               | Part Number        |       |
|--------|---------------|---------|--------------------|--------------------|--------------------|--------|--------|--------------------|---------|--------------------|--------------------|--------------------|-------|
| 1.0mm  | 630Vdc        | U2J     | 22pF               | ±5%                | GRM31A7U2J220JW31# |        | 1.0mm  | 500Vdc             | U2J     | 39pF               | ±5%                | GRM31A7U2H390JW31# |       |
|        |               |         | 27pF               | ±5%                | GRM31A7U2J270JW31# |        |        |                    |         | 47pF               | ±5%                | GRM31A7U2H470JW31# |       |
|        |               |         | 33pF               | ±5%                | GRM31A7U2J330JW31# |        |        |                    |         | 56pF               | ±5%                | GRM31A7U2H560JW31# |       |
|        |               |         | 39pF               | ±5%                | GRM31A7U2J390JW31# |        |        |                    |         | 68pF               | ±5%                | GRM31A7U2H680JW31# |       |
|        |               |         | 47pF               | ±5%                | GRM31A7U2J470JW31# |        |        |                    |         | 82pF               | ±5%                | GRM31A7U2H820JW31# |       |
|        |               |         | 56pF               | ±5%                | GRM31A7U2J560JW31# |        |        |                    |         | 100pF              | ±5%                | GRM31A7U2H101JW31# |       |
|        |               |         | 68pF               | ±5%                | GRM31A7U2J680JW31# |        |        |                    |         | 120pF              | ±5%                | GRM31A7U2H121JW31# |       |
|        |               |         | 82pF               | ±5%                | GRM31A7U2J820JW31# |        |        |                    |         | 150pF              | ±5%                | GRM31A7U2H151JW31# |       |
|        |               |         | 100pF              | ±5%                | GRM31A7U2J101JW31# |        |        |                    |         | 180pF              | ±5%                | GRM31A7U2H181JW31# |       |
|        |               |         | 120pF              | ±5%                | GRM31A7U2J121JW31# |        |        |                    |         | 220pF              | ±5%                | GRM31A7U2H221JW31# |       |
|        |               |         | 150pF              | ±5%                | GRM31A7U2J151JW31# |        |        |                    |         | 270pF              | ±5%                | GRM31A7U2H271JW31# |       |
|        |               |         | 180pF              | ±5%                | GRM31A7U2J181JW31# |        |        |                    |         | 330pF              | ±5%                | GRM31A7U2H331JW31# |       |
|        |               |         | 220pF              | ±5%                | GRM31A7U2J221JW31# |        |        |                    |         | 390pF              | ±5%                | GRM31A7U2H391JW31# |       |
|        |               |         | 270pF              | ±5%                | GRM31A7U2J271JW31# |        |        |                    |         | 470pF              | ±5%                | GRM31A7U2H471JW31# |       |
|        |               |         | 330pF              | ±5%                | GRM31A7U2J331JW31# |        |        |                    |         | 560pF              | ±5%                | GRM31A7U2H561JW31# |       |
|        |               |         | 390pF              | ±5%                | GRM31A7U2J391JW31# |        |        |                    |         | 680pF              | ±5%                | GRM31A7U2H681JW31# |       |
|        |               |         | 470pF              | ±5%                | GRM31A7U2J471JW31# |        |        |                    |         | 820pF              | ±5%                | GRM31A7U2H821JW31# |       |
|        |               |         | 560pF              | ±5%                | GRM31A7U2J561JW31# |        |        |                    |         | 1000pF             | ±5%                | GRM31A7U2H102JW31# |       |
|        |               |         | 680pF              | ±5%                | GRM31A7U2J681JW31# |        |        |                    |         | 1200pF             | ±5%                | GRM31A7U2H122JW31# |       |
|        |               |         | 820pF              | ±5%                | GRM31A7U2J821JW31# |        |        |                    |         | 1500pF             | ±5%                | GRM31A7U2H152JW31# |       |
|        |               |         | 1000pF             | ±5%                | GRM31A7U2J102JW31# |        |        |                    |         | 1800pF             | ±5%                | GRM31A7U2H182JW31# |       |
|        |               |         | 1200pF             | ±5%                | GRM31A7U2J122JW31# |        |        |                    |         | 2200pF             | ±5%                | GRM31A7U2H222JW31# |       |
|        | 1500pF        | ±5%     | GRM31A7U2J152JW31# |                    | 250Vdc             | COG    |        | 390pF              | ±5%     | GRM31A5C2E391JWA1# |                    |                    |       |
|        | 1800pF        | ±5%     | GRM31A7U2J182JW31# |                    |                    |        |        | 470pF              | ±5%     | GRM31A5C2E471JWA1# |                    |                    |       |
|        | 2200pF        | ±5%     | GRM31A7U2J222JW31# |                    |                    |        |        | 560pF              | ±5%     | GRM31A5C2E561JWA1# |                    |                    |       |
|        | 500Vdc        | COG     | 10pF               | ±5%                |                    |        |        | GRM31A5C2H100JW01# |         | 680pF              | ±5%                | GRM31A5C2E681JWA1# |       |
|        |               |         | 12pF               | ±5%                |                    |        |        | GRM31A5C2H120JW01# |         | 820pF              | ±5%                | GRM31A5C2E821JWA1# |       |
|        |               |         | 15pF               | ±5%                |                    |        |        | GRM31A5C2H150JW01# |         | 1000pF             | ±5%                | GRM31A5C2E102JWA1# |       |
|        |               |         | 18pF               | ±5%                |                    |        |        | GRM31A5C2H180JW01# |         | 1200pF             | ±5%                | GRM31A5C2E122JWA1# |       |
|        |               |         | 22pF               | ±5%                |                    |        |        | GRM31A5C2H220JW01# |         | 1500pF             | ±5%                | GRM31A5C2E152JWA1# |       |
|        |               |         | 27pF               | ±5%                |                    |        |        | GRM31A5C2H270JW01# |         | 1800pF             | ±5%                | GRM31A5C2E182JWA1# |       |
|        |               |         | 33pF               | ±5%                |                    |        |        | GRM31A5C2H330JW01# |         | 2200pF             | ±5%                | GRM31A5C2E222JWA1# |       |
|        |               |         | 39pF               | ±5%                | GRM31A5C2H390JW01# |        |        | 2700pF             | ±5%     | GRM31A5C2E272JWA1# |                    |                    |       |
|        |               |         | 47pF               | ±5%                | GRM31A5C2H470JW01# |        |        | 3300pF             | ±5%     | GRM31A5C2E332JWA1# |                    |                    |       |
|        |               |         | 56pF               | ±5%                | GRM31A5C2H560JW01# |        |        | 3900pF             | ±5%     | GRM31A5C2E392JWA1# |                    |                    |       |
|        |               |         | 68pF               | ±5%                | GRM31A5C2H680JW01# |        |        | 4700pF             | ±5%     | GRM31A5C2E472JWA1# |                    |                    |       |
|        |               |         | 82pF               | ±5%                | GRM31A5C2H820JW01# |        |        | 5600pF             | ±5%     | GRM31A5C2E562JWA1# |                    |                    |       |
|        |               |         | 100pF              | ±5%                | GRM31A5C2H101JW01# |        |        | 6800pF             | ±5%     | GRM31A5C2E682JWA1# |                    |                    |       |
|        |               |         | 120pF              | ±5%                | GRM31A5C2H121JW01# |        |        | U2J                | 2700pF  | ±5%                | GRM31A7U2E272JW31# |                    |       |
|        |               |         | 150pF              | ±5%                | GRM31A5C2H151JW01# |        |        |                    | 3300pF  | ±5%                | GRM31A7U2E332JW31# |                    |       |
|        |               |         | 180pF              | ±5%                | GRM31A5C2H181JW01# |        |        |                    | 3900pF  | ±5%                | GRM31A7U2E392JW31# |                    |       |
|        |               |         | 220pF              | ±5%                | GRM31A5C2H221JW01# |        |        |                    | 4700pF  | ±5%                | GRM31A7U2E472JW31# |                    |       |
|        |               |         | 270pF              | ±5%                | GRM31A5C2H271JW01# |        |        |                    | 5600pF  | ±5%                | GRM31A7U2E562JW31# |                    |       |
|        |               |         | 330pF              | ±5%                | GRM31A5C2H331JW01# |        |        |                    | 200Vdc  | U2J                |                    | 2700pF             | ±5%   |
| 390pF  |               |         | ±5%                | GRM31A5C2H391JW01# |                    | 3300pF | ±5%    | GRM31A7U2D332JW31# |         |                    |                    |                    |       |
| 470pF  |               |         | ±5%                | GRM31A5C2H471JW01# |                    | 3900pF | ±5%    | GRM31A7U2D392JW31# |         |                    |                    |                    |       |
| 560pF  |               |         | ±5%                | GRM31A5C2H561JW01# |                    | 4700pF | ±5%    | GRM31A7U2D472JW31# |         |                    |                    |                    |       |
| U2J    |               |         | 10pF               | ±5%                | GRM31A7U2H100JW31# |        | 5600pF | ±5%                |         |                    |                    | GRM31A7U2D562JW31# |       |
|        |               |         | 12pF               | ±5%                | GRM31A7U2H120JW31# |        | 1.25mm | 1000Vdc            |         |                    |                    | COG                | 560pF |
|        |               |         | 15pF               | ±5%                | GRM31A7U2H150JW31# |        |        |                    | 680pF   | ±5%                | GRM31B5C3A681JWA1# |                    |       |
|        | 18pF          | ±5%     | GRM31A7U2H180JW31# |                    | U2J                | 390pF  |        |                    | ±5%     | GRM31B7U3A391JW31# |                    |                    |       |
|        | 22pF          | ±5%     | GRM31A7U2H220JW31# |                    |                    | 470pF  |        |                    | ±5%     | GRM31B7U3A471JW31# |                    |                    |       |
|        | 27pF          | ±5%     | GRM31A7U2H270JW31# |                    |                    | 560pF  |        |                    | ±5%     | GRM31B7U3A561JW31# |                    |                    |       |
|        | 33pF          | ±5%     | GRM31A7U2H330JW31# |                    |                    | 680pF  | ±5%    | GRM31B7U3A681JW31# |         |                    |                    |                    |       |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

(→ 3.2×1.6mm)

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |    |
|--------|---------------|---------|---------|------|--------------------|----|
| 1.25mm | 630Vdc        | COG     | 680pF   | ±5%  | GRM31B5C2J681JW01# |    |
|        |               |         | 820pF   | ±5%  | GRM31B5C2J821JW01# |    |
|        |               |         | 1000pF  | ±5%  | GRM31B5C2J102JW01# |    |
|        |               |         | 2200pF  | ±5%  | GRM31B5C2J222JWA1# |    |
|        |               |         | 2700pF  | ±5%  | GRM31B5C2J272JWA1# |    |
|        |               | U2J     | 2700pF  | ±5%  | GRM31B7U2J272JW31# |    |
|        |               |         | 3300pF  | ±5%  | GRM31B7U2J332JW31# |    |
|        |               |         |         |      |                    |    |
|        |               |         |         |      |                    |    |
|        |               |         |         |      |                    |    |
|        | 500Vdc        | COG     | 680pF   | ±5%  | GRM31B5C2H681JW01# |    |
|        |               |         | 820pF   | ±5%  | GRM31B5C2H821JW01# |    |
|        |               |         | 1000pF  | ±5%  | GRM31B5C2H102JW01# |    |
|        |               |         | 2700pF  | ±5%  | GRM31B7U2H272JW31# |    |
|        |               |         | 3300pF  | ±5%  | GRM31B7U2H332JW31# |    |
|        |               | U2J     | 2700pF  | ±5%  | GRM31B7U2H272JW31# |    |
|        |               |         | 3300pF  | ±5%  | GRM31B7U2H332JW31# |    |
|        |               |         |         |      |                    |    |
|        |               |         |         |      |                    |    |
|        |               |         |         |      |                    |    |
|        | 250Vdc        | COG     | 8200pF  | ±5%  | GRM31B5C2E822JWA1# |    |
|        |               |         | 10000pF | ±5%  | GRM31B5C2E103JWA1# |    |
|        |               |         | 12000pF | ±5%  | GRM31B5C2E123JWA1# |    |
|        |               | U2J     | 6800pF  | ±5%  | GRM31B7U2E682JW31# |    |
|        |               |         | 8200pF  | ±5%  | GRM31B7U2E822JW31# |    |
|        |               |         | 10000pF | ±5%  | GRM31B7U2E103JW31# |    |
|        |               |         | 12000pF | ±5%  | GRM31B7U2E123JW31# |    |
|        |               |         |         |      |                    |    |
|        |               |         |         |      |                    |    |
|        |               |         |         |      |                    |    |
|        | 200Vdc        | U2J     | 6800pF  | ±5%  | GRM31B7U2D682JW31# |    |
|        |               |         | 8200pF  | ±5%  | GRM31B7U2D822JW31# |    |
|        |               |         | 10000pF | ±5%  | GRM31B7U2D103JW31# |    |
|        |               | COG     | 47000pF | ±5%  | GRM31M5C2A473JA01# | D1 |
|        |               |         | 56000pF | ±5%  | GRM31M5C2A563JA01# | D1 |
|        |               |         |         |      |                    |    |
|        | 100Vdc        | CH      | 47000pF | ±5%  | GRM31M2C2A473JA01# | D1 |
|        |               |         | 56000pF | ±5%  | GRM31M2C2A563JA01# | D1 |
|        |               |         |         |      |                    |    |
|        |               | COG     | 47000pF | ±5%  | GRM31M5C1H473JA01# |    |
|        |               |         | 56000pF | ±5%  | GRM31M5C1H563JA01# |    |
|        |               |         |         |      |                    |    |
|        | 50Vdc         | CH      | 47000pF | ±5%  | GRM31M2C1H473JA01# |    |
|        |               |         | 56000pF | ±5%  | GRM31M2C1H563JA01# |    |
|        |               |         |         |      |                    |    |
|        |               |         |         |      |                    |    |
|        |               |         |         |      |                    |    |
|        |               |         |         |      |                    |    |
|        |               | SL      | 68000pF | ±5%  | GRM31M1X1H683JA01# |    |
|        |               |         | 82000pF | ±5%  | GRM31M1X1H823JA01# |    |
|        |               |         | 0.10μF  | ±5%  | GRM31M1X1H104JA01# |    |
|        |               |         |         |      |                    |    |
|        |               |         |         |      |                    |    |
|        |               |         |         |      |                    |    |
|        |               | U2J     | 68000pF | ±5%  | GRM31M7U1H683JA01# |    |
|        |               |         | 82000pF | ±5%  | GRM31M7U1H823JA01# |    |
|        |               |         | 0.10μF  | ±5%  | GRM31M7U1H104JA01# |    |
|        |               |         |         |      |                    |    |
|        |               |         |         |      |                    |    |
|        |               |         |         |      |                    |    |
|        | 1.8mm         | COG     | 820pF   | ±5%  | GRM31C5C3A821JWA3# |    |
|        |               |         | 1000pF  | ±5%  | GRM31C5C3A102JWA3# |    |
|        |               |         | 820pF   | ±5%  | GRM31C7U3A821JW32# |    |
|        |               |         | 1000pF  | ±5%  | GRM31C7U3A102JW32# |    |
|        |               | U2J     | 3300pF  | ±5%  | GRM31C5C2J332JWA3# |    |
|        |               |         | 3900pF  | ±5%  | GRM31C7U2J392JW32# |    |
|        |               |         | 4700pF  | ±5%  | GRM31C7U2J472JW32# |    |
|        |               |         |         |      |                    |    |
|        |               | COG     | 3900pF  | ±5%  | GRM31C7U2H392JW32# |    |
|        |               |         | 4700pF  | ±5%  | GRM31C7U2H472JW32# |    |
|        |               | U2J     | 15000pF | ±5%  | GRM31C5C2E153JWA3# |    |
|        |               |         | 15000pF | ±5%  | GRM31C7U2E153JW32# |    |
|        |               |         | 18000pF | ±5%  | GRM31C7U2E183JW32# |    |
|        |               |         | 22000pF | ±5%  | GRM31C7U2E223JW32# |    |
|        | 100Vdc        | COG     | 68000pF | ±5%  | GRM31C5C2A683JA01# | D1 |
|        |               |         | 82000pF | ±5%  | GRM31C5C2A823JA01# | D1 |

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |    |
|--------|---------------|---------|---------|------|--------------------|----|
| 1.8mm  | 100Vdc        | COG     | 0.10μF  | ±5%  | GRM31C5C2A104JA01# | D1 |
|        |               |         | 68000pF | ±5%  | GRM31C2C2A683JA01# | D1 |
|        |               |         | 82000pF | ±5%  | GRM31C2C2A823JA01# | D1 |
|        |               |         | 0.10μF  | ±5%  | GRM31C2C2A104JA01# | D1 |
|        | 50Vdc         | COG     | 68000pF | ±5%  | GRM31C5C1H683JA01# |    |
|        |               |         | 82000pF | ±5%  | GRM31C5C1H823JA01# |    |
|        |               |         | 0.10μF  | ±5%  | GRM31C5C1H104JA01# |    |
|        |               |         |         |      |                    |    |
|        |               | CH      | 68000pF | ±5%  | GRM31C2C1H683JA01# |    |
|        |               |         | 82000pF | ±5%  | GRM31C2C1H823JA01# |    |
|        |               |         | 0.10μF  | ±5%  | GRM31C2C1H104JA01# |    |
|        |               |         |         |      |                    |    |
|        | 25Vdc         | COG     | 0.12μF  | ±5%  | GRM31C5C1E124JA01# |    |
|        |               |         | 0.12μF  | ±5%  | GRM31C2C1E124JA01# |    |
|        |               | CH      | 0.12μF  | ±5%  | GRM31C5C1C124JA01# |    |
|        |               |         | 0.12μF  | ±5%  | GRM31C2C1C124JA01# |    |

### 3.2×2.5mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 1.0mm  | 2000Vdc       | U2J     | 82pF    | ±5%  | GRM32A7U3D820JW31# |  |
|        |               |         | 100pF   | ±5%  | GRM32A7U3D101JW31# |  |
|        |               |         | 120pF   | ±5%  | GRM32A7U3D121JW31# |  |
|        |               |         | 150pF   | ±5%  | GRM32A7U3D151JW31# |  |
|        | 630Vdc        | U2J     | 1200pF  | ±5%  | GRM32A7U2J122JW31# |  |
|        |               |         | 1500pF  | ±5%  | GRM32A7U2J152JW31# |  |
|        |               |         | 1800pF  | ±5%  | GRM32A7U2J182JW31# |  |
|        |               |         | 2200pF  | ±5%  | GRM32A7U2J222JW31# |  |
|        | 500Vdc        | U2J     | 1200pF  | ±5%  | GRM32A7U2H122JW31# |  |
|        |               |         | 1500pF  | ±5%  | GRM32A7U2H152JW31# |  |
|        |               |         | 1800pF  | ±5%  | GRM32A7U2H182JW31# |  |
|        |               |         | 2200pF  | ±5%  | GRM32A7U2H222JW31# |  |
|        | 1.25mm        | U2J     | 180pF   | ±5%  | GRM32B7U3D181JW31# |  |
|        |               |         | 220pF   | ±5%  | GRM32B7U3D221JW31# |  |
|        |               | U2J     | 1200pF  | ±5%  | GRM32B7U3A122JW31# |  |
|        |               |         | 5600pF  | ±5%  | GRM32B7U2J562JW31# |  |
|        | 1.5mm         | U2J     | 5600pF  | ±5%  | GRM32B7U2H562JW31# |  |
|        |               |         | 1500pF  | ±5%  | GRM32Q7U3A152JW31# |  |
|        |               | U2J     | 6800pF  | ±5%  | GRM32Q7U2J682JW31# |  |
|        |               |         | 6800pF  | ±5%  | GRM32Q7U2H682JW31# |  |
|        | 2.0mm         | U2J     | 27000pF | ±5%  | GRM32Q7U2E273JW31# |  |
|        |               |         | 1800pF  | ±5%  | GRM32D7U3A182JW31# |  |
|        |               | U2J     | 2200pF  | ±5%  | GRM32D7U3A222JW31# |  |
|        |               |         | 8200pF  | ±5%  | GRM32D7U2J822JW31# |  |
| 1.25mm | 630Vdc        | U2J     | 10000pF | ±5%  | GRM32D7U2J103JW31# |  |
|        |               |         | 8200pF  | ±5%  | GRM32D7U2H822JW31# |  |
|        |               |         | 10000pF | ±5%  | GRM32D7U2H103JW31# |  |
|        |               |         |         |      |                    |  |
|        | 500Vdc        | U2J     | 33000pF | ±5%  | GRM32D7U2E333JW31# |  |
|        |               |         | 39000pF | ±5%  | GRM32D7U2E393JW31# |  |
|        |               |         | 47000pF | ±5%  | GRM32D7U2E473JW31# |  |
|        |               |         |         |      |                    |  |
|        | 250Vdc        | U2J     | 33000pF | ±5%  | GRM32D7U2E333JW31# |  |
|        |               |         | 39000pF | ±5%  | GRM32D7U2E393JW31# |  |

Part number # indicates the package specification code.

## GRM Series Temperature Compensating Type Part Number List

### 4.5×2.0mm

| T max. | Rated Voltage | TC Code | Cap.  | Tol. | Part Number        |  |
|--------|---------------|---------|-------|------|--------------------|--|
| 1.0mm  | 3150Vdc       | U2J     | 10pF  | ±5%  | GRM42A7U3F100JW31# |  |
|        |               |         | 12pF  | ±5%  | GRM42A7U3F120JW31# |  |
|        |               |         | 15pF  | ±5%  | GRM42A7U3F150JW31# |  |
|        |               |         | 18pF  | ±5%  | GRM42A7U3F180JW31# |  |
|        |               |         | 22pF  | ±5%  | GRM42A7U3F220JW31# |  |
|        |               |         | 27pF  | ±5%  | GRM42A7U3F270JW31# |  |
|        |               |         | 33pF  | ±5%  | GRM42A7U3F330JW31# |  |
|        |               |         | 39pF  | ±5%  | GRM42A7U3F390JW31# |  |
|        |               |         | 47pF  | ±5%  | GRM42A7U3F470JW31# |  |
|        |               |         | 56pF  | ±5%  | GRM42A7U3F560JW31# |  |
|        |               |         | 68pF  | ±5%  | GRM42A7U3F680JW31# |  |
|        |               |         | 82pF  | ±5%  | GRM42A7U3F820JW31# |  |
|        |               |         | 100pF | ±5%  | GRM42A7U3F101JW31# |  |

### 4.5×3.2mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 1.5mm  | 1000Vdc       | U2J     | 2700pF  | ±5%  | GRM43Q7U3A272JW31# |  |
|        |               |         | 3300pF  | ±5%  | GRM43Q7U3A332JW31# |  |
|        | 630Vdc        | U2J     | 12000pF | ±5%  | GRM43Q7U2J123JW31# |  |
|        | 500Vdc        | U2J     | 12000pF | ±5%  | GRM43Q7U2H123JW31# |  |
| 2.0mm  | 1000Vdc       | U2J     | 3900pF  | ±5%  | GRM43D7U3A392JW31# |  |
|        |               |         | 4700pF  | ±5%  | GRM43D7U3A472JW31# |  |
|        | 630Vdc        | U2J     | 15000pF | ±5%  | GRM43D7U2J153JW31# |  |
|        |               |         | 18000pF | ±5%  | GRM43D7U2J183JW31# |  |
|        |               |         | 22000pF | ±5%  | GRM43D7U2J223JW31# |  |
|        | 500Vdc        | U2J     | 15000pF | ±5%  | GRM43D7U2H153JW31# |  |
|        |               |         | 18000pF | ±5%  | GRM43D7U2H183JW31# |  |
|        |               |         | 22000pF | ±5%  | GRM43D7U2H223JW31# |  |

### 5.7×5.0mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 1.5mm  | 1000Vdc       | U2J     | 5600pF  | ±5%  | GRM55Q7U3A562JW31# |  |
|        |               |         | 6800pF  | ±5%  | GRM55Q7U3A682JW31# |  |
|        | 630Vdc        | U2J     | 27000pF | ±5%  | GRM55Q7U2J273JW31# |  |
|        | 500Vdc        | U2J     | 27000pF | ±5%  | GRM55Q7U2H273JW31# |  |
| 2.0mm  | 1000Vdc       | U2J     | 8200pF  | ±5%  | GRM55D7U3A822JW31# |  |
|        |               |         | 10000pF | ±5%  | GRM55D7U3A103JW31# |  |
|        | 630Vdc        | U2J     | 33000pF | ±5%  | GRM55D7U2J333JW31# |  |
|        |               |         | 39000pF | ±5%  | GRM55D7U2J393JW31# |  |
|        |               |         | 47000pF | ±5%  | GRM55D7U2J473JW31# |  |
|        | 500Vdc        | U2J     | 33000pF | ±5%  | GRM55D7U2H333JW31# |  |
|        |               |         | 39000pF | ±5%  | GRM55D7U2H393JW31# |  |
|        |               |         | 47000pF | ±5%  | GRM55D7U2H473JW31# |  |

## GRM Series High Dielectric Constant Type Part Number List

### 0.4×0.2mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |  |
|--------|---------------|---------|--------|------|--------------------|--|
| 0.22mm | 16Vdc         | X7R     | 100pF  | ±10% | GRM022R71C101KE14# |  |
|        |               |         |        | ±20% | GRM022R71C101ME14# |  |
|        |               |         | 150pF  | ±10% | GRM022R71C151KE14# |  |
|        |               |         |        | ±20% | GRM022R71C151ME14# |  |
|        |               |         | 220pF  | ±10% | GRM022R71C221KE14# |  |
|        |               |         |        | ±20% | GRM022R71C221ME14# |  |
|        |               |         | 330pF  | ±10% | GRM022R71C331KE14# |  |
|        |               |         |        | ±20% | GRM022R71C331ME14# |  |
|        |               |         | 470pF  | ±10% | GRM022R71C471KE14# |  |
|        |               |         |        | ±20% | GRM022R71C471ME14# |  |
|        |               |         | 1000pF | ±10% | GRM022R71C102KE14# |  |
|        |               |         |        | ±20% | GRM022R71C102ME14# |  |
|        | 10Vdc         | X7R     | 100pF  | ±10% | GRM022R71A101KA01# |  |
|        |               |         |        | ±20% | GRM022R71A101MA01# |  |
|        |               |         | 150pF  | ±10% | GRM022R71A151KA01# |  |
|        |               |         |        | ±20% | GRM022R71A151MA01# |  |
|        |               |         | 220pF  | ±10% | GRM022R71A221KA01# |  |
|        |               |         |        | ±20% | GRM022R71A221MA01# |  |
|        |               |         | 330pF  | ±10% | GRM022R71A331KA01# |  |
|        |               |         |        | ±20% | GRM022R71A331MA01# |  |
|        |               |         | 470pF  | ±10% | GRM022R71A471KA01# |  |
|        |               |         |        | ±20% | GRM022R71A471MA01# |  |
|        |               |         | 680pF  | ±10% | GRM022R71A681KA12# |  |
|        |               |         |        | ±20% | GRM022R71A681MA12# |  |
|        |               |         | 820pF  | ±10% | GRM022R71A821KA12# |  |
|        |               |         |        | ±20% | GRM022R71A821MA12# |  |
|        |               |         | 1000pF | ±10% | GRM022R71A102KA12# |  |
|        |               |         |        | ±20% | GRM022R71A102MA12# |  |
|        |               | X5R     | 100pF  | ±10% | GRM022R61A101KA01# |  |
|        |               |         |        | ±20% | GRM022R61A101MA01# |  |
|        |               |         | 150pF  | ±10% | GRM022R61A151KA01# |  |
|        |               |         |        | ±20% | GRM022R61A151MA01# |  |
|        |               |         | 220pF  | ±10% | GRM022R61A221KA01# |  |
|        |               |         |        | ±20% | GRM022R61A221MA01# |  |
|        |               |         | 330pF  | ±10% | GRM022R61A331KA01# |  |
|        |               |         |        | ±20% | GRM022R61A331MA01# |  |
|        |               |         | 470pF  | ±10% | GRM022R61A471KA01# |  |
|        |               |         |        | ±20% | GRM022R61A471MA01# |  |
|        |               |         | 680pF  | ±10% | GRM022R61A681KE19# |  |
|        |               |         |        | ±20% | GRM022R61A681ME19# |  |
|        |               |         | 1000pF | ±10% | GRM022R61A102KE19# |  |
|        |               |         |        | ±20% | GRM022R61A102ME19# |  |
|        |               |         | 1500pF | ±10% | GRM022R61A152KE19# |  |
|        |               |         |        | ±20% | GRM022R61A152ME19# |  |
|        |               |         | 2200pF | ±10% | GRM022R61A222KE19# |  |
|        |               |         |        | ±20% | GRM022R61A222ME19# |  |
|        |               |         | 3300pF | ±10% | GRM022R61A332KE19# |  |
|        |               |         |        | ±20% | GRM022R61A332ME19# |  |
|        |               |         | 4700pF | ±10% | GRM022R61A472KE19# |  |
|        |               |         |        | ±20% | GRM022R61A472ME19# |  |
|        |               |         | 6800pF | ±10% | GRM022R61A682KE19# |  |
|        |               |         |        | ±20% | GRM022R61A682ME19# |  |

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |    |
|--------|---------------|---------|---------|------|--------------------|----|
| 0.22mm | 10Vdc         | X5R     | 10000pF | ±10% | GRM022R61A103KE19# |    |
|        |               |         |         | ±20% | GRM022R61A103ME19# |    |
|        |               |         | 100pF   | ±10% | GRM022B11A101KA01# |    |
|        |               |         |         | ±20% | GRM022B11A101MA01# |    |
|        |               |         | 150pF   | ±10% | GRM022B11A151KA01# |    |
|        |               |         |         | ±20% | GRM022B11A151MA01# |    |
|        |               |         | 220pF   | ±10% | GRM022B11A221KA01# |    |
|        |               |         |         | ±20% | GRM022B11A221MA01# |    |
|        |               |         | 330pF   | ±10% | GRM022B11A331KA01# |    |
|        |               |         |         | ±20% | GRM022B11A331MA01# |    |
|        |               |         | 470pF   | ±10% | GRM022B11A471KA01# |    |
|        |               |         |         | ±20% | GRM022B11A471MA01# |    |
|        |               |         | 680pF   | ±10% | GRM022B31A681KE19# |    |
|        |               |         |         | ±20% | GRM022B31A681ME19# |    |
|        |               |         | 1000pF  | ±10% | GRM022B31A102KE19# |    |
|        |               |         |         | ±20% | GRM022B31A102ME19# |    |
|        |               |         | 1500pF  | ±10% | GRM022B31A152KE19# |    |
|        |               |         |         | ±20% | GRM022B31A152ME19# |    |
|        |               |         | 2200pF  | ±10% | GRM022B31A222KE19# |    |
|        |               |         |         | ±20% | GRM022B31A222ME19# |    |
|        |               |         | 3300pF  | ±10% | GRM022B31A332KE19# |    |
|        |               |         |         | ±20% | GRM022B31A332ME19# |    |
|        |               |         | 4700pF  | ±10% | GRM022B31A472KE19# |    |
|        |               |         |         | ±20% | GRM022B31A472ME19# |    |
|        |               |         | 6800pF  | ±10% | GRM022B31A682KE19# |    |
|        |               |         |         | ±20% | GRM022B31A682ME19# |    |
|        |               |         | 10000pF | ±10% | GRM022B31A103KE19# |    |
|        |               |         |         | ±20% | GRM022B31A103ME19# |    |
|        | 6.3Vdc        | X5R     | 1000pF  | ±20% | GRM022R60J102ME19# |    |
|        |               |         |         | ±20% | GRM022R60J152ME19# |    |
|        |               |         | 2200pF  | ±20% | GRM022R60J222ME19# |    |
|        |               |         |         | ±20% | GRM022R60J332ME19# |    |
|        |               |         | 4700pF  | ±20% | GRM022R60J472ME19# |    |
|        |               |         |         | ±20% | GRM022R60J682ME19# |    |
|        |               |         | 10000pF | ±20% | GRM022R60J103ME19# |    |
|        |               |         |         | ±20% | GRM022R60J153ME15# | D1 |
|        |               |         | 22000pF | ±10% | GRM022R60J223KE15# | D1 |
|        |               |         |         | ±20% | GRM022R60J223ME15# | D1 |
|        |               |         | 33000pF | ±20% | GRM022R60J333ME15# | D1 |
|        |               |         |         | ±20% | GRM022R60J473ME15# | D1 |
|        |               |         | 68000pF | ±20% | GRM022R60J683ME15# | D1 |
|        |               |         |         | ±20% | GRM022R60J104ME15# | D1 |
|        |               |         | 0.10μF  | ±20% | GRM022R60J104ME15# | D1 |
|        |               |         |         | ±20% | GRM022B30J102ME19# |    |
|        |               | B       | 1000pF  | ±20% | GRM022B30J152ME19# |    |
|        |               |         |         | ±20% | GRM022B30J222ME19# |    |
|        |               |         | 2200pF  | ±20% | GRM022B30J332ME19# |    |
|        |               |         |         | ±20% | GRM022B30J472ME19# |    |
|        |               |         | 4700pF  | ±20% | GRM022B30J682ME19# |    |
|        |               |         |         | ±20% | GRM022B30J103ME19# |    |
|        |               |         | 6800pF  | ±20% | GRM022B30J103ME19# |    |
|        |               |         |         | ±20% | GRM022B30J103ME19# |    |
|        |               |         | 10000pF | ±20% | GRM022B30J103ME19# |    |
|        |               |         |         | ±20% | GRM022B30J103ME19# |    |
|        |               |         | 15000pF | ±10% | GRM022R60G153KE15# |    |
|        |               |         |         | ±20% | GRM022R60G153ME15# |    |
|        |               |         | 22000pF | ±10% | GRM022R60G223KE15# |    |
|        |               |         |         | ±20% | GRM022R60G223ME15# |    |
|        | 4Vdc          | X6T     | 0.10μF  | ±20% | GRM022D80G104ME15# | D1 |
|        |               |         |         | ±20% | GRM022D80G104ME15# |    |
|        |               |         | 15000pF | ±10% | GRM022R60G153KE15# |    |
|        |               |         |         | ±20% | GRM022R60G153ME15# |    |
|        |               |         | 22000pF | ±10% | GRM022R60G223KE15# |    |
|        |               |         |         | ±20% | GRM022R60G223ME15# |    |
|        |               |         | 33000pF | ±10% | GRM022R60G333KE15# |    |
|        |               |         |         | ±20% | GRM022R60G333ME15# |    |
|        |               |         | 47000pF | ±10% | GRM022R60G473KE15# |    |
|        |               |         |         | ±20% | GRM022R60G473ME15# |    |
|        |               |         | 68000pF | ±10% | GRM022R60G683KE15# |    |
|        |               |         |         | ±20% | GRM022R60G683ME15# |    |

Part number # indicates the package specification code.

## GRM Series High Dielectric Constant Type Part Number List

(→ 0.4×0.2mm)

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 0.22mm | 4Vdc          | X5R     | 33000pF | ±10% | GRM022R60G333KE15# |  |
|        |               |         |         | ±20% | GRM022R60G333ME15# |  |
|        |               |         | 47000pF | ±10% | GRM022R60G473KE15# |  |
|        |               |         |         | ±20% | GRM022R60G473ME15# |  |
|        |               |         | 68000pF | ±20% | GRM022R60G683ME15# |  |
|        |               |         | 0.10μF  | ±20% | GRM022R60G104ME15# |  |
|        | 2.5Vdc        | X6T     | 0.10μF  | ±20% | GRM022D80E104ME15# |  |

0.6×0.3mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |    |
|--------|---------------|---------|--------|------|--------------------|----|
| 0.33mm | 50Vdc         | X7R     | 100pF  | ±10% | GRM033R71H101KA12# |    |
|        |               |         |        | ±20% | GRM033R71H101MA12# |    |
|        |               |         | 150pF  | ±10% | GRM033R71H151KA12# |    |
|        |               |         |        | ±20% | GRM033R71H151MA12# |    |
|        |               |         | 220pF  | ±10% | GRM033R71H221KA12# |    |
|        |               |         |        | ±20% | GRM033R71H221MA12# |    |
|        |               |         | 330pF  | ±10% | GRM033R71H331KA12# |    |
|        |               |         |        | ±20% | GRM033R71H331MA12# |    |
|        |               |         | 470pF  | ±10% | GRM033R71H471KA12# |    |
|        |               |         |        | ±20% | GRM033R71H471MA12# |    |
|        |               |         | 680pF  | ±10% | GRM033R71H681KA12# |    |
|        |               |         |        | ±20% | GRM033R71H681MA12# |    |
|        |               |         | 1000pF | ±10% | GRM033R71H102KA12# |    |
|        |               |         |        | ±20% | GRM033R71H102MA12# |    |
|        |               |         | 1500pF | ±10% | GRM033R71H152KA12# |    |
|        |               |         |        | ±20% | GRM033R71H152MA12# |    |
|        |               | B       | 100pF  | ±10% | GRM033B31H101KA12# |    |
|        |               |         |        | ±20% | GRM033B31H101MA12# |    |
|        |               |         | 150pF  | ±10% | GRM033B31H151KA12# |    |
|        |               |         |        | ±20% | GRM033B31H151MA12# |    |
|        |               |         | 220pF  | ±10% | GRM033B31H221KA12# |    |
|        |               |         |        | ±20% | GRM033B31H221MA12# |    |
|        |               |         | 330pF  | ±10% | GRM033B31H331KA12# |    |
|        |               |         |        | ±20% | GRM033B31H331MA12# |    |
|        |               |         | 470pF  | ±10% | GRM033B31H471KA12# |    |
|        |               |         |        | ±20% | GRM033B31H471MA12# |    |
|        |               |         | 680pF  | ±10% | GRM033B31H681KA12# |    |
|        |               |         |        | ±20% | GRM033B31H681MA12# |    |
|        |               |         | 1000pF | ±10% | GRM033B31H102KA12# |    |
|        |               |         |        | ±20% | GRM033B31H102MA12# |    |
|        |               |         | 1500pF | ±10% | GRM033B31H152KA12# |    |
|        |               |         |        | ±20% | GRM033B31H152MA12# |    |
|        | 35Vdc         | X5R     | 0.10μF | ±10% | GRM033R6YA104KE14# | D1 |
|        |               |         |        | ±20% | GRM033R6YA104ME14# | D1 |
|        | 25Vdc         | X7R     | 1000pF | ±10% | GRM033R71E102KA01# |    |
|        |               |         | 1500pF | ±10% | GRM033R71E152KA01# |    |
|        |               |         | 2200pF | ±10% | GRM033R71E222KA12# |    |
|        |               |         |        | ±20% | GRM033R71E222MA12# |    |
|        |               |         | 3300pF | ±10% | GRM033R71E332KA12# |    |
|        |               |         |        | ±20% | GRM033R71E332MA12# |    |
|        |               |         | 4700pF | ±10% | GRM033R71E472KE14# | D1 |
|        |               |         |        | ±20% | GRM033R71E472ME14# | D1 |

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |    |
|--------|---------------|---------|---------|------|--------------------|----|
| 0.33mm | 25Vdc         | X7R     | 6800pF  | ±10% | GRM033R71E682KE14# | D1 |
|        |               |         |         | ±20% | GRM033R71E682ME14# | D1 |
|        |               |         | 10000pF | ±10% | GRM033R71E103KE14# | D1 |
|        |               |         |         | ±20% | GRM033R71E103ME14# | D1 |
|        |               | R       | 100pF   | ±10% | GRM033R11E101KA01# |    |
|        |               |         | 150pF   | ±10% | GRM033R11E151KA01# |    |
|        |               |         | 220pF   | ±10% | GRM033R11E221KA01# |    |
|        |               |         | 330pF   | ±10% | GRM033R11E331KA01# |    |
|        |               |         | 470pF   | ±10% | GRM033R11E471KA01# |    |
|        |               |         | 680pF   | ±10% | GRM033R11E681KA01# |    |
|        |               |         | 1000pF  | ±10% | GRM033R11E102KA01# |    |
|        |               |         | 1500pF  | ±10% | GRM033R11E152KA01# |    |
|        |               | X6S     | 0.10μF  | ±10% | GRM033C81E104KE14# | D1 |
|        |               |         |         | ±20% | GRM033C81E104ME14# | D1 |
|        |               | X5R     | 4700pF  | ±10% | GRM033R61E472KA12# | D1 |
|        |               |         |         | ±20% | GRM033R61E472MA12# | D1 |
|        |               |         | 6800pF  | ±10% | GRM033R61E682KA12# | D1 |
|        |               |         |         | ±20% | GRM033R61E682MA12# | D1 |
|        |               |         | 10000pF | ±10% | GRM033R61E103KA12# | D1 |
|        |               |         |         | ±20% | GRM033R61E103MA12# | D1 |
|        |               | B       | 1000pF  | ±10% | GRM033B11E102KA01# |    |
|        |               |         |         | ±20% | GRM033B11E102MA01# |    |
|        |               |         | 1500pF  | ±10% | GRM033B11E152KA01# |    |
|        |               |         |         | ±20% | GRM033B11E152MA01# |    |
|        |               |         | 2200pF  | ±10% | GRM033B31E222KA12# |    |
|        |               |         |         | ±20% | GRM033B31E222MA12# |    |
|        |               | X7S     | 3300pF  | ±10% | GRM033B31E332KA12# |    |
|        |               |         |         | ±20% | GRM033B31E332MA12# |    |
|        |               |         | 10000pF | ±10% | GRM033B31E103KA12# | D1 |
|        |               |         |         | ±20% | GRM033B31E103MA12# | D1 |
|        | 16Vdc         | X7R     | 2200pF  | ±10% | GRM033R71C222KA88# |    |
|        |               |         |         | ±10% | GRM033R71C332KA88# |    |
|        |               |         | 4700pF  | ±10% | GRM033R71C472KE14# |    |
|        |               |         |         | ±20% | GRM033R71C472ME14# |    |
|        |               |         | 6800pF  | ±10% | GRM033R71C682KE14# |    |
|        |               |         |         | ±20% | GRM033R71C682ME14# |    |
|        |               | X7S     | 10000pF | ±10% | GRM033R71C103KE14# |    |
|        |               |         |         | ±20% | GRM033R71C103ME14# |    |
|        |               |         | 0.10μF  | ±10% | GRM033C71C104KE14# | D1 |
|        |               |         |         | ±20% | GRM033C71C104ME14# | D1 |
|        |               | R       | 2200pF  | ±10% | GRM033R11C222KA88# |    |
|        |               |         |         | ±10% | GRM033R11C332KA88# |    |
|        |               | X6S     | 0.10μF  | ±10% | GRM033C81C104KE14# |    |
|        |               |         |         | ±20% | GRM033C81C104ME14# |    |
|        |               | X5R     | 10000pF | ±10% | GRM033R61C103KA12# |    |
|        |               |         |         | ±20% | GRM033R61C103MA12# |    |
|        |               |         | 15000pF | ±10% | GRM033R61C153KE84# | D1 |
|        |               |         |         | ±20% | GRM033R61C153ME84# | D1 |
|        |               |         | 22000pF | ±10% | GRM033R61C223KE84# | D1 |
|        |               |         |         | ±20% | GRM033R61C223ME84# | D1 |
|        |               |         | 33000pF | ±10% | GRM033R61C333KE84# | D1 |
|        |               |         |         | ±20% | GRM033R61C333ME84# | D1 |

Part number # indicates the package specification code.

## GRM Series High Dielectric Constant Type Part Number List

(→ 0.6×0.3mm)

| T max.  | Rated Voltage | TC Code | Cap.               | Tol.               | Part Number        |                    |  |
|---------|---------------|---------|--------------------|--------------------|--------------------|--------------------|--|
| 0.33mm  | 16Vdc         | X5R     | 47000pF            | ±10%               | GRM033R61C473KE84# | D1                 |  |
|         |               |         |                    | ±20%               | GRM033R61C473ME84# | D1                 |  |
|         |               |         | 68000pF            | ±10%               | GRM033R61C683KE84# | D1                 |  |
|         |               |         |                    | ±20%               | GRM033R61C683ME84# | D1                 |  |
|         |               |         | 0.10μF             | ±10%               | GRM033R61C104KE14# |                    |  |
|         |               |         |                    | ±20%               | GRM033R61C104ME14# |                    |  |
|         |               | B       | 2200pF             | ±10%               | GRM033B31C222KA87# |                    |  |
|         |               |         |                    | ±20%               | GRM033B31C222MA87# |                    |  |
|         |               |         | 3300pF             | ±10%               | GRM033B31C332KA87# |                    |  |
|         |               |         |                    | ±20%               | GRM033B31C332MA87# |                    |  |
|         |               |         | 10000pF            | ±10%               | GRM033B31C103KA12# |                    |  |
|         |               |         |                    | ±20%               | GRM033B31C103MA12# |                    |  |
|         |               |         | 15000pF            | ±10%               | GRM033B31C153KE84# | D1                 |  |
|         |               |         |                    | ±20%               | GRM033B31C153ME84# | D1                 |  |
|         |               |         | 22000pF            | ±10%               | GRM033B31C223KE84# | D1                 |  |
|         |               |         |                    | ±20%               | GRM033B31C223ME84# | D1                 |  |
|         |               |         | 33000pF            | ±10%               | GRM033B31C333KE84# | D1                 |  |
|         |               |         |                    | ±20%               | GRM033B31C333ME84# | D1                 |  |
|         |               |         | 47000pF            | ±10%               | GRM033B31C473KE84# | D1                 |  |
|         |               |         |                    | ±20%               | GRM033B31C473ME84# | D1                 |  |
|         | 68000pF       | ±10%    | GRM033B31C683KE84# | D1                 |                    |                    |  |
|         |               | ±20%    | GRM033B31C683ME84# | D1                 |                    |                    |  |
|         | 0.10μF        | ±10%    | GRM033B31C104KE84# | D1                 |                    |                    |  |
|         |               | ±20%    | GRM033B31C104ME84# | D1                 |                    |                    |  |
|         | 10Vdc         | X7R     | 4700pF             | ±10%               | GRM033R71A472KA01# |                    |  |
|         |               |         |                    | ±20%               | GRM033R71A472MA01# |                    |  |
|         |               |         | 6800pF             | ±10%               | GRM033R71A682KA01# |                    |  |
|         |               |         |                    | ±20%               | GRM033R71A682MA01# |                    |  |
|         |               |         | 10000pF            | ±10%               | GRM033R71A103KA01# |                    |  |
|         |               |         |                    | ±20%               | GRM033R71A103MA01# |                    |  |
|         |               |         | X7S                | 0.10μF             | ±10%               | GRM033C71A104KE14# |  |
|         |               |         |                    |                    | ±20%               | GRM033C71A104ME14# |  |
|         |               |         | R                  | 4700pF             | ±10%               | GRM033R11A472KA01# |  |
|         |               |         |                    |                    | ±20%               | GRM033R11A472MA01# |  |
|         |               | 6800pF  |                    | ±10%               | GRM033R11A682KA01# |                    |  |
|         |               |         |                    | ±20%               | GRM033R11A682MA01# |                    |  |
|         |               | 10000pF |                    | ±10%               | GRM033R11A103KA01# |                    |  |
|         |               |         |                    | ±20%               | GRM033R11A103MA01# |                    |  |
|         |               | X5R     | 4700pF             | ±10%               | GRM033R61A472KA01# |                    |  |
|         |               |         |                    | ±20%               | GRM033R61A472MA01# |                    |  |
| 6800pF  |               |         | ±10%               | GRM033R61A682KA01# |                    |                    |  |
|         |               |         | ±20%               | GRM033R61A682MA01# |                    |                    |  |
| 15000pF |               |         | ±10%               | GRM033R61A153KE84# |                    |                    |  |
|         |               |         | ±20%               | GRM033R61A153ME84# |                    |                    |  |
| 22000pF |               |         | ±10%               | GRM033R61A223KE84# |                    |                    |  |
|         |               |         | ±20%               | GRM033R61A223ME84# |                    |                    |  |
| 33000pF |               |         | ±10%               | GRM033R61A333KE84# |                    |                    |  |
|         |               |         | ±20%               | GRM033R61A333ME84# |                    |                    |  |
| 47000pF |               |         | ±10%               | GRM033R61A473KE84# |                    |                    |  |
|         |               |         | ±20%               | GRM033R61A473ME84# |                    |                    |  |
| 68000pF |               |         | ±10%               | GRM033R61A683KE84# |                    |                    |  |
|         |               |         | ±20%               | GRM033R61A683ME84# |                    |                    |  |
| 0.10μF  |               | ±10%    | GRM033R61A104KE84# |                    |                    |                    |  |
|         |               | ±20%    | GRM033R61A104ME84# |                    |                    |                    |  |

| T max. | Rated Voltage | TC Code | Cap.    | Tol.               | Part Number        |                    |  |
|--------|---------------|---------|---------|--------------------|--------------------|--------------------|--|
| 0.33mm | 10Vdc         | X5R     | 0.22μF  | ±20%               | GRM033R61A224ME90# | D1                 |  |
|        |               |         |         |                    |                    |                    |  |
|        |               |         | 4700pF  | ±10%               | GRM033B11A472KA01# |                    |  |
|        |               |         |         | ±20%               | GRM033B11A472MA01# |                    |  |
|        |               |         | 6800pF  | ±10%               | GRM033B11A682KA01# |                    |  |
|        |               |         |         | ±20%               | GRM033B11A682MA01# |                    |  |
|        |               |         | 15000pF | ±10%               | GRM033B31A153KE84# |                    |  |
|        |               |         |         | ±20%               | GRM033B31A153ME84# |                    |  |
|        |               |         | 22000pF | ±10%               | GRM033B31A223KE84# |                    |  |
|        |               |         |         | ±20%               | GRM033B31A223ME84# |                    |  |
|        |               |         | 33000pF | ±10%               | GRM033B31A333KE84# |                    |  |
|        |               |         |         | ±20%               | GRM033B31A333ME84# |                    |  |
|        |               |         | 47000pF | ±10%               | GRM033B31A473KE84# |                    |  |
|        |               |         |         | ±20%               | GRM033B31A473ME84# |                    |  |
|        |               |         | 68000pF | ±10%               | GRM033B31A683KE84# |                    |  |
|        |               |         |         | ±20%               | GRM033B31A683ME84# |                    |  |
|        |               |         | 0.10μF  | ±10%               | GRM033B31A104KE84# |                    |  |
|        |               |         |         | ±20%               | GRM033B31A104ME84# |                    |  |
|        | 6.3Vdc        | X7R     | 4700pF  | ±10%               | GRM033R70J472KA01# |                    |  |
|        |               |         |         | ±10%               | GRM033R70J682KA01# |                    |  |
|        |               |         |         | ±10%               | GRM033R70J103KA01# |                    |  |
|        |               |         | R       | 4700pF             | ±10%               | GRM033R10J472KA01# |  |
|        |               |         |         |                    | ±10%               | GRM033R10J682KA01# |  |
|        |               |         |         |                    | ±10%               | GRM033R10J103KA01# |  |
|        |               | X6S     | 15000pF | ±10%               | GRM033C80J153KE01# |                    |  |
|        |               |         |         | ±20%               | GRM033C80J153ME01# |                    |  |
|        |               |         | 22000pF | ±10%               | GRM033C80J223KE01# |                    |  |
|        |               |         |         | ±20%               | GRM033C80J223ME01# |                    |  |
|        |               |         | 33000pF | ±10%               | GRM033C80J333KE01# |                    |  |
|        |               |         |         | ±20%               | GRM033C80J333ME01# |                    |  |
|        |               |         | 47000pF | ±10%               | GRM033C80J473KE19# |                    |  |
|        |               |         |         | ±20%               | GRM033C80J473ME19# |                    |  |
|        |               |         | 68000pF | ±10%               | GRM033C80J683KE84# | D1                 |  |
|        |               |         |         | ±20%               | GRM033C80J683ME84# | D1                 |  |
|        |               |         | 0.10μF  | ±10%               | GRM033C80J104KE84# | D1                 |  |
|        |               |         |         | ±20%               | GRM033C80J104ME84# | D1                 |  |
|        |               | 0.22μF  | ±20%    | GRM033C80J224ME90# | D1                 |                    |  |
|        |               |         |         |                    |                    |                    |  |
|        |               | 4Vdc    | X5R     | 0.22μF             | ±20%               | GRM033R60J224ME90# |  |
|        |               |         |         |                    |                    |                    |  |
|        |               |         | B       | 4700pF             | ±10%               | GRM033B10J472KA01# |  |
|        |               |         |         |                    | ±10%               | GRM033B10J682KA01# |  |
|        |               |         |         | 15000pF            | ±10%               | GRM033B10J153KE01# |  |
|        |               |         |         |                    | ±20%               | GRM033B10J153ME01# |  |
|        |               |         |         | 22000pF            | ±10%               | GRM033B10J223KE01# |  |
|        |               |         |         |                    | ±20%               | GRM033B10J223ME01# |  |
|        |               |         |         | 33000pF            | ±10%               | GRM033B10J333KE01# |  |
|        |               |         |         |                    | ±20%               | GRM033B10J333ME01# |  |

1.0×0.5mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |           |
|--------|---------------|---------|--------|------|--------------------|-----------|
| 0.22mm | 10Vdc         | X5R     | 0.10μF | ±10% | GRM152R61A104KE19# | <b>D1</b> |
|        |               |         |        | ±20% | GRM152R61A104ME19# | <b>D1</b> |
|        |               |         | 0.22μF | ±10% | GRM152R61A224KE19# | <b>D1</b> |
|        |               |         |        | ±10% | GRM152R61A224KE19# | <b>D1</b> |

Part number # indicates the package specification code.

## GRM Series High Dielectric Constant Type Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |           |
|--------|---------------|---------|--------|------|--------------------|-----------|
| 0.22mm | 10Vdc         | X5R     | 0.22μF | ±20% | GRM152R61A224ME19# | <b>D1</b> |
|        |               |         | 0.10μF | ±10% | GRM152B31A104KE19# | <b>D1</b> |
|        |               |         |        | ±20% | GRM152B31A104ME19# | <b>D1</b> |
|        |               | B       | 0.22μF | ±10% | GRM152B31A224KE19# | <b>D1</b> |
|        |               |         |        | ±20% | GRM152B31A224ME19# | <b>D1</b> |
|        |               |         | 0.10μF | ±10% | GRM152C80J104KE19# | <b>D1</b> |
|        | 6.3Vdc        | X6S     | 0.10μF | ±10% | GRM152C80J104KE19# | <b>D1</b> |
|        |               |         |        | ±20% | GRM152C80J104ME19# | <b>D1</b> |
|        |               |         | 0.22μF | ±10% | GRM152C80J224KE19# | <b>D1</b> |
|        |               |         |        | ±20% | GRM152C80J224ME19# | <b>D1</b> |
|        |               | X5R     | 0.10μF | ±10% | GRM152R60J104KE19# |           |
|        |               |         |        | ±20% | GRM152R60J104ME19# |           |
|        |               |         | 0.22μF | ±10% | GRM152R60J224KE19# |           |
|        |               |         |        | ±20% | GRM152R60J224ME19# |           |
|        |               |         | 0.47μF | ±20% | GRM152R60J474ME15# | <b>D1</b> |
|        |               |         | 1.0μF  | ±20% | GRM152R60J105ME15# | <b>D1</b> |
|        |               | B       | 0.10μF | ±10% | GRM152B30J104KE19# |           |
|        |               |         |        | ±20% | GRM152B30J104ME19# |           |
|        |               |         | 0.22μF | ±10% | GRM152B30J224KE19# |           |
|        |               |         |        | ±20% | GRM152B30J224ME19# |           |
|        |               |         | 0.47μF | ±20% | GRM152B30J474ME15# | <b>D1</b> |
|        |               |         |        |      |                    |           |
|        | 4Vdc          | X7T     | 0.10μF | ±10% | GRM152D70G104KE15# | <b>D1</b> |
|        |               |         |        | ±20% | GRM152D70G104ME15# | <b>D1</b> |
|        |               |         | 0.22μF | ±10% | GRM152D70G224KE15# | <b>D1</b> |
|        |               |         |        | ±20% | GRM152D70G224ME15# | <b>D1</b> |
|        |               | X6S     | 0.10μF | ±10% | GRM152C80G104KE19# |           |
|        |               |         |        | ±20% | GRM152C80G104ME19# |           |
|        |               |         | 0.22μF | ±10% | GRM152C80G224KE19# |           |
|        |               |         |        | ±20% | GRM152C80G224ME19# |           |
|        |               | X6T     | 0.47μF | ±20% | GRM152D80G474ME15# |           |
|        |               |         | 1.0μF  | ±20% | GRM152D80G105ME15# | <b>D1</b> |
|        |               | X5R     | 1.0μF  | ±20% | GRM152R60G105ME15# |           |
|        | 2.5Vdc        | X7T     | 0.10μF | ±10% | GRM152D70E104KE19# |           |
|        |               |         |        | ±20% | GRM152D70E104ME19# |           |
|        |               |         | 0.22μF | ±10% | GRM152D70E224KE19# |           |
|        |               |         |        | ±20% | GRM152D70E224ME19# |           |
| 0.3mm  | 50Vdc         | X7R     | 220pF  | ±10% | GRM15XR71H221KA86# |           |
|        |               |         | 330pF  | ±10% | GRM15XR71H331KA86# |           |
|        |               |         | 470pF  | ±10% | GRM15XR71H471KA86# |           |
|        |               |         | 680pF  | ±10% | GRM15XR71H681KA86# |           |
|        |               |         | 1000pF | ±10% | GRM15XR71H102KA86# |           |
|        |               |         | 1500pF | ±10% | GRM15XR71H152KA86# |           |
|        |               | R       | 220pF  | ±10% | GRM15XR11H221KA86# |           |
|        |               |         | 330pF  | ±10% | GRM15XR11H331KA86# |           |
|        |               |         | 470pF  | ±10% | GRM15XR11H471KA86# |           |
|        |               |         | 680pF  | ±10% | GRM15XR11H681KA86# |           |
|        |               |         | 1000pF | ±10% | GRM15XR11H102KA86# |           |
|        |               |         | 1500pF | ±10% | GRM15XR11H152KA86# |           |
|        |               | B       | 220pF  | ±10% | GRM15XB11H221KA86# |           |
|        |               |         |        | ±20% | GRM15XB11H221MA86# |           |
|        |               |         | 330pF  | ±10% | GRM15XB11H331KA86# |           |
|        |               |         |        | ±20% | GRM15XB11H331MA86# |           |
|        |               |         | 470pF  | ±10% | GRM15XB11H471KA86# |           |
|        |               |         |        | ±20% | GRM15XB11H471MA86# |           |
|        |               |         | 680pF  | ±10% | GRM15XB11H681KA86# |           |
|        | 10Vdc         | X7R     | 220pF  | ±10% | GRM15XR71H221KA86# |           |
|        |               |         | 330pF  | ±10% | GRM15XR71H331KA86# |           |
|        |               |         | 470pF  | ±10% | GRM15XR71H471KA86# |           |
|        |               |         | 680pF  | ±10% | GRM15XR71H681KA86# |           |
|        |               |         | 1000pF | ±10% | GRM15XR71H102KA86# |           |
|        |               |         | 1500pF | ±10% | GRM15XR71H152KA86# |           |

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |           |
|--------|---------------|---------|---------|------|--------------------|-----------|
| 0.3mm  | 50Vdc         | B       | 680pF   | ±20% | GRM15XB11H681MA86# |           |
|        |               |         | 1000pF  | ±10% | GRM15XB11H102KA86# |           |
|        |               |         | 1500pF  | ±20% | GRM15XB11H102MA86# |           |
|        |               |         |         | ±10% | GRM15XB11H152KA86# |           |
|        |               |         |         | ±20% | GRM15XB11H152MA86# |           |
|        |               |         |         |      |                    |           |
|        | 25Vdc         | X7R     | 2200pF  | ±10% | GRM15XR71E222KA86# |           |
|        |               |         |         | ±20% | GRM15XR71E222MA86# |           |
|        |               | B       | 2200pF  | ±10% | GRM15XB11E222KA86# |           |
|        |               |         |         | ±20% | GRM15XB11E222MA86# |           |
|        |               |         |         | ±10% | GRM15XR71C332KA86# |           |
|        |               |         |         | ±20% | GRM15XR71C332MA86# |           |
|        | 16Vdc         | X7R     | 3300pF  | ±10% | GRM15XR71C332KA86# |           |
|        |               |         |         | ±20% | GRM15XR71C332MA86# |           |
|        |               |         | 4700pF  | ±10% | GRM15XR71C472KA86# |           |
|        |               |         |         | ±20% | GRM15XR71C472MA86# |           |
|        |               |         | 6800pF  | ±10% | GRM15XR71C682KA86# |           |
|        |               |         |         | ±20% | GRM15XR71C682MA86# |           |
|        |               | B       | 10000pF | ±10% | GRM15XR71C103KA86# |           |
|        |               |         |         | ±20% | GRM15XR71C103MA86# |           |
|        |               |         | 3300pF  | ±10% | GRM15XB11C332KA86# |           |
|        |               |         |         | ±20% | GRM15XB11C332MA86# |           |
|        |               |         | 4700pF  | ±10% | GRM15XB11C472KA86# |           |
|        |               |         |         | ±20% | GRM15XB11C472MA86# |           |
|        | 10Vdc         | X5R     | 15000pF | ±10% | GRM15XR61A153KA86# |           |
|        |               |         |         | ±20% | GRM15XR61A153MA86# |           |
|        |               |         | 22000pF | ±10% | GRM15XR61A223KA86# |           |
|        |               |         |         | ±20% | GRM15XR61A223MA86# |           |
|        |               |         | 33000pF | ±10% | GRM15XR61A333KA86# |           |
|        |               |         |         | ±20% | GRM15XR61A333MA86# |           |
|        | 10Vdc         | X5R     | 1.0μF   | ±20% | GRM153R61A105ME95# | <b>D1</b> |
|        |               |         | 1.0μF   | ±20% | GRM153B31A105ME95# | <b>D1</b> |
|        |               |         |         |      |                    |           |
|        |               | X6T     | 1.0μF   | ±20% | GRM153D80J105ME95# | <b>D1</b> |
|        |               |         | 1.0μF   | ±20% | GRM153R60J105ME95# |           |
|        |               |         |         |      |                    |           |
|        | 6.3Vdc        | X6T     | 1.0μF   | ±20% | GRM153D80J105ME95# | <b>D1</b> |
|        |               |         |         |      |                    |           |
|        |               |         | 1.0μF   | ±20% | GRM153R60J105ME95# |           |
|        |               | X5R     | 1.0μF   | ±20% | GRM153B30J105ME95# |           |
|        |               |         |         |      |                    |           |
|        |               |         | 1.0μF   | ±20% | GRM153D80G105ME95# |           |
| 0.55mm | 100Vdc        | X7R     | 220pF   | ±10% | GRM155R72A221KA01# |           |
|        |               |         | 330pF   | ±10% | GRM155R72A331KA01# |           |
|        |               |         | 470pF   | ±10% | GRM155R72A471KA01# |           |
|        |               |         | 680pF   | ±10% | GRM155R72A681KA01# |           |
|        |               |         | 1000pF  | ±10% | GRM155R72A102KA01# |           |
|        |               |         | 1500pF  | ±10% | GRM155R72A152KA01# |           |
|        |               |         | 2200pF  | ±10% | GRM155R72A222KA01# |           |
|        |               |         | 3300pF  | ±10% | GRM155R72A332KA01# |           |
|        |               |         | 4700pF  | ±10% | GRM155R72A472KA01# |           |
|        |               |         | 220pF   | ±10% | GRM155R71H221KA01# |           |
|        |               |         |         | ±10% | GRM155R71H331KA01# |           |
|        |               |         | 470pF   | ±10% | GRM155R71H471KA01# |           |
|        | 50Vdc         | X7R     | 680pF   | ±10% | GRM155R71H681KA01# |           |
|        |               |         | 1000pF  | ±10% | GRM155R71H102KA01# |           |
|        |               |         | 1500pF  | ±10% | GRM155R71H152KA01# |           |
|        |               |         | 2200pF  | ±10% | GRM155R71H222KA01# |           |
|        |               |         | 3300pF  | ±10% | GRM155R71H332KA01# |           |
|        |               |         | 220pF   | ±10% | GRM155R71H221KA01# |           |
|        |               |         |         | ±10% | GRM155R71H331KA01# |           |
|        |               |         | 470pF   | ±10% | GRM155R71H471KA01# |           |
|        |               |         | 680pF   | ±10% | GRM155R71H681KA01# |           |
|        |               |         | 1000pF  | ±10% | GRM155R71H102KA01# |           |
|        |               |         | 1500pF  | ±10% | GRM155R71H152KA01# |           |
|        |               |         | 2200pF  | ±10% | GRM155R71H222KA01# |           |

Part number # indicates the package specification code.

## GRM Series High Dielectric Constant Type Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 0.55mm | 50Vdc         | X7R     | 4700pF  | ±10% | GRM155R71H472KA01# |  |
|        |               |         | 6800pF  | ±10% | GRM155R71H682KA88# |  |
|        |               |         | 10000pF | ±10% | GRM155R71H103KA88# |  |
|        |               |         | 15000pF | ±10% | GRM155R71H153KA12# |  |
|        |               |         | 22000pF | ±10% | GRM155R71H223KA12# |  |
|        |               |         | 33000pF | ±10% | GRM155R71H333KE14# |  |
|        |               |         |         | ±20% | GRM155R71H333ME14# |  |
|        |               |         | 47000pF | ±10% | GRM155R71H473KE14# |  |
|        |               |         |         | ±20% | GRM155R71H473ME14# |  |
|        |               |         | 68000pF | ±10% | GRM155R71H683KE14# |  |
|        |               |         |         | ±20% | GRM155R71H683ME14# |  |
|        |               |         | 0.10μF  | ±10% | GRM155R71H104KE14# |  |
|        |               |         |         | ±20% | GRM155R71H104ME14# |  |
|        |               | R       | 220pF   | ±10% | GRM155R11H221KA01# |  |
|        |               |         | 330pF   | ±10% | GRM155R11H331KA01# |  |
|        |               |         | 470pF   | ±10% | GRM155R11H471KA01# |  |
|        |               |         | 680pF   | ±10% | GRM155R11H681KA01# |  |
|        |               |         | 1000pF  | ±10% | GRM155R11H102KA01# |  |
|        |               |         | 1500pF  | ±10% | GRM155R11H152KA01# |  |
|        |               |         | 2200pF  | ±10% | GRM155R11H222KA01# |  |
|        |               |         | 3300pF  | ±10% | GRM155R11H332KA01# |  |
|        |               |         | 4700pF  | ±10% | GRM155R11H472KA01# |  |
|        |               |         | 6800pF  | ±10% | GRM155R11H682KA88# |  |
|        |               |         | 10000pF | ±10% | GRM155R11H103KA88# |  |
|        |               | X6S     | 33000pF | ±10% | GRM155C81H333KE14# |  |
|        |               |         |         | ±20% | GRM155C81H333ME14# |  |
|        |               |         | 47000pF | ±10% | GRM155C81H473KE14# |  |
|        |               |         |         | ±20% | GRM155C81H473ME14# |  |
|        |               |         | 68000pF | ±10% | GRM155C81H683KE14# |  |
|        |               |         |         | ±20% | GRM155C81H683ME14# |  |
|        |               | X5R     | 33000pF | ±10% | GRM155R61H333KE14# |  |
|        |               |         |         | ±20% | GRM155R61H333ME14# |  |
|        |               |         | 47000pF | ±10% | GRM155R61H473KE14# |  |
|        |               |         |         | ±20% | GRM155R61H473ME14# |  |
|        |               |         | 68000pF | ±10% | GRM155R61H683KE14# |  |
|        |               |         |         | ±20% | GRM155R61H683ME14# |  |
|        |               | 0.10μF  |         | ±10% | GRM155R61H104KE14# |  |
|        |               |         |         | ±20% | GRM155R61H104ME14# |  |
|        |               |         |         | ±10% | GRM155B11H221KA01# |  |
|        |               |         |         | ±20% | GRM155B11H221MA01# |  |
|        |               |         | 330pF   | ±10% | GRM155B11H331KA01# |  |
|        |               |         |         | ±20% | GRM155B11H331MA01# |  |
|        |               | 470pF   |         | ±10% | GRM155B11H471KA01# |  |
|        |               |         |         | ±20% | GRM155B11H471MA01# |  |
|        |               |         | 680pF   | ±10% | GRM155B11H681KA01# |  |
|        |               |         |         | ±20% | GRM155B11H681MA01# |  |
|        |               |         | 1000pF  | ±10% | GRM155B11H102KA01# |  |
|        |               |         |         | ±20% | GRM155B11H102MA01# |  |
|        |               | 1500pF  |         | ±10% | GRM155B11H152KA01# |  |
|        |               |         |         | ±20% | GRM155B11H152MA01# |  |
|        |               |         | 2200pF  | ±10% | GRM155B11H222KA01# |  |
|        |               |         |         | ±20% | GRM155B11H222MA01# |  |
|        |               |         | 3300pF  | ±10% | GRM155B11H332KA01# |  |
|        |               |         |         | ±20% | GRM155B11H332MA01# |  |

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |           |
|--------|---------------|---------|---------|------|--------------------|-----------|
| 0.55mm | 50Vdc         | B       | 4700pF  | ±10% | GRM155B11H472KA01# |           |
|        |               |         |         | ±20% | GRM155B11H472MA01# |           |
|        |               |         | 6800pF  | ±10% | GRM155B31H682KA88# |           |
|        |               |         |         | ±20% | GRM155B31H682MA88# |           |
|        |               |         | 10000pF | ±10% | GRM155B31H103KA88# |           |
|        |               |         |         | ±20% | GRM155B31H103MA88# |           |
|        |               |         | 15000pF | ±10% | GRM155B31H153KA12# |           |
|        |               |         |         | ±20% | GRM155B31H153MA12# |           |
|        |               |         | 22000pF | ±10% | GRM155B31H223KA12# |           |
|        |               |         |         | ±20% | GRM155B31H223MA12# |           |
|        |               |         | 0.10μF  | ±10% | GRM155B31H104KE14# |           |
|        |               |         |         | ±20% | GRM155B31H104ME14# |           |
|        | 35Vdc         | X6S     | 0.22μF  | ±10% | GRM155C8YA224KE01# | <b>D1</b> |
|        |               |         |         | ±20% | GRM155C8YA224ME01# | <b>D1</b> |
|        |               | X5R     | 0.22μF  | ±10% | GRM155R6YA224KE01# | <b>D1</b> |
|        |               |         |         | ±20% | GRM155R6YA224ME01# | <b>D1</b> |
|        |               |         | 0.47μF  | ±10% | GRM155R6YA474KE01# | <b>D1</b> |
|        |               |         |         | ±20% | GRM155R6YA474ME01# | <b>D1</b> |
|        | 25Vdc         | X7R     | 2200pF  | ±10% | GRM155R71E222KA01# |           |
|        |               |         | 10000pF | ±10% | GRM155R71E103KA01# |           |
|        |               |         | 15000pF | ±10% | GRM155R71E153KA61# |           |
|        |               |         | 22000pF | ±10% | GRM155R71E223KA61# |           |
|        |               |         | 33000pF | ±10% | GRM155R71E333KA88# |           |
|        |               |         | 47000pF | ±10% | GRM155R71E473KA88# |           |
|        |               |         | 68000pF | ±10% | GRM155R71E683KE14# |           |
|        |               |         |         | ±20% | GRM155R71E683ME14# |           |
|        |               |         | 0.10μF  | ±10% | GRM155R71E104KE14# |           |
|        |               |         |         | ±20% | GRM155R71E104ME14# |           |
|        |               | R       | 6800pF  | ±10% | GRM155R11E682KA01# |           |
|        |               |         | 10000pF | ±10% | GRM155R11E103KA01# |           |
|        |               |         | 15000pF | ±10% | GRM155R11E153KA61# |           |
|        |               |         | 22000pF | ±10% | GRM155R11E223KA61# |           |
|        |               |         | 33000pF | ±10% | GRM155R11E333KA88# |           |
|        |               |         | 47000pF | ±10% | GRM155R11E473KA88# |           |
|        |               | X6S     | 0.22μF  | ±10% | GRM155C81E224KE01# |           |
|        |               |         |         | ±20% | GRM155C81E224ME01# |           |
|        |               | X5R     | 68000pF | ±10% | GRM155R61E683KA87# |           |
|        |               |         |         | ±20% | GRM155R61E683MA87# |           |
|        |               | 0.10μF  |         | ±10% | GRM155R61E104KA87# |           |
|        |               |         |         | ±20% | GRM155R61E104MA87# |           |
|        |               |         | 0.22μF  | ±10% | GRM155R61E224KE01# |           |
|        |               |         |         | ±20% | GRM155R61E224ME01# |           |
|        |               |         | 0.47μF  | ±10% | GRM155R61E474KE01# |           |
|        |               |         |         | ±20% | GRM155R61E474ME01# |           |
|        |               | 1.0μF   |         | ±10% | GRM155R61E105KA12# | <b>D1</b> |
|        |               |         |         | ±20% | GRM155R61E105MA12# | <b>D1</b> |
|        | B             | 2200pF  |         | ±10% | GRM155B11E222KA01# |           |
|        |               |         |         | ±20% | GRM155B11E222MA01# |           |
|        |               |         | 10000pF | ±10% | GRM155B11E103KA01# |           |
|        |               |         |         | ±20% | GRM155B11E103MA01# |           |
|        |               |         | 15000pF | ±10% | GRM155B11E153KA61# |           |
|        |               |         |         | ±20% | GRM155B11E153MA61# |           |
|        |               |         | 22000pF | ±10% | GRM155B11E223KA61# |           |
|        |               |         |         | ±20% | GRM155B11E223MA61# |           |
|        |               |         | 33000pF | ±10% | GRM155B31E333KA87# |           |
|        |               |         |         | ±20% | GRM155B31E333MA87# |           |

Part number # indicates the package specification code.

## GRM Series High Dielectric Constant Type Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.    | Tol.               | Part Number        |                    |                    |  |
|--------|---------------|---------|---------|--------------------|--------------------|--------------------|--------------------|--|
| 0.55mm | 25Vdc         | B       | 33000pF | ±20%               | GRM155B31E333MA87# |                    |                    |  |
|        |               |         | 47000pF | ±10%               | GRM155B31E473KA87# |                    |                    |  |
|        |               |         |         | ±20%               | GRM155B31E473MA87# |                    |                    |  |
|        |               |         |         | ±20%               | GRM155B31E473MA87# |                    |                    |  |
|        |               |         | 68000pF | ±10%               | GRM155B31E683KA87# |                    |                    |  |
|        |               |         |         | ±20%               | GRM155B31E683MA87# |                    |                    |  |
|        |               |         | 0.10μF  | ±10%               | GRM155B31E104KA87# |                    |                    |  |
|        |               | ±20%    |         | GRM155B31E104MA87# |                    |                    |                    |  |
|        |               | 1.0μF   | ±10%    | GRM155B31E105KA12# | D1                 |                    |                    |  |
|        |               |         | ±20%    | GRM155B31E105MA12# | D1                 |                    |                    |  |
|        |               | 16Vdc   | X7R     | 4700pF             | ±10%               | GRM155R71C472KA01# |                    |  |
|        |               |         |         | 10000pF            | ±10%               | GRM155R71C103KA01# |                    |  |
|        |               |         |         |                    | ±20%               | GRM155R71C103MA01# |                    |  |
|        |               |         |         |                    | ±20%               | GRM155R71C103MA01# |                    |  |
|        | 68000pF       |         |         | ±10%               | GRM155R71C683KA88# |                    |                    |  |
|        | 0.15μF        |         |         | ±10%               | GRM155R71C154KA12# |                    |                    |  |
|        | 0.22μF        |         |         | ±10%               | GRM155R71C224KA12# |                    |                    |  |
|        | R             |         |         | 68000pF            | ±10%               | GRM155R11C683KA88# |                    |  |
|        | X6S           |         |         | 0.47μF             | ±10%               | GRM155C81C474KE01# |                    |  |
|        |               |         |         |                    | ±20%               | GRM155C81C474ME01# |                    |  |
|        | X5R           |         | 0.22μF  | ±10%               | GRM155R61C224KA12# |                    |                    |  |
|        |               |         |         | ±20%               | GRM155R61C224MA12# |                    |                    |  |
|        |               |         | 0.47μF  | ±10%               | GRM155R61C474KE01# |                    |                    |  |
|        |               |         |         | ±20%               | GRM155R61C474ME01# |                    |                    |  |
|        |               |         | 1.0μF   | ±10%               | GRM155R61C105KA12# |                    |                    |  |
|        |               |         |         | ±20%               | GRM155R61C105MA12# |                    |                    |  |
|        |               |         | B       | 10000pF            | ±10%               | GRM155B11C103KA01# |                    |  |
|        |               |         |         |                    | ±20%               | GRM155B11C103MA01# |                    |  |
|        | 1.0μF         |         |         | ±10%               | GRM155B31C105KA12# |                    |                    |  |
|        |               |         |         | ±20%               | GRM155B31C105MA12# |                    |                    |  |
|        | 10Vdc         |         |         | X7R                | 0.22μF             | ±10%               | GRM155R71A224KE01# |  |
|        |               |         |         |                    |                    | ±20%               | GRM155R71A224ME01# |  |
|        |               |         | 0.47μF  |                    | ±10%               | GRM155R71A474KE01# |                    |  |
|        |               |         |         |                    | ±20%               | GRM155R71A474ME01# |                    |  |
|        |               |         | X6S     |                    | 1.0μF              | ±10%               | GRM155C81A105KA12# |  |
|        |               |         |         |                    |                    | ±20%               | GRM155C81A105MA12# |  |
|        |               |         | X5R     | 33000pF            | ±10%               | GRM155R61A333KA01# |                    |  |
|        |               |         |         |                    | 0.10μF             | ±10%               | GRM155R61A104KA01# |  |
|        |               |         |         |                    |                    | ±20%               | GRM155R61A104MA01# |  |
|        |               |         |         | 0.15μF             | ±10%               | GRM155R61A154KE19# |                    |  |
|        |               |         |         |                    | ±20%               | GRM155R61A154ME19# |                    |  |
|        |               | 0.22μF  |         | ±10%               | GRM155R61A224KE19# |                    |                    |  |
|        |               |         |         | ±20%               | GRM155R61A224ME19# |                    |                    |  |
|        |               | 0.33μF  |         | ±10%               | GRM155R61A334KE15# |                    |                    |  |
|        |               |         |         | ±20%               | GRM155R61A334ME15# |                    |                    |  |
|        |               | 0.47μF  |         | ±10%               | GRM155R61A474KE15# |                    |                    |  |
|        |               |         |         | ±20%               | GRM155R61A474ME15# |                    |                    |  |
|        |               | 0.68μF  |         | ±10%               | GRM155R61A684KE15# |                    |                    |  |
|        |               |         |         |                    | ±20%               | GRM155R61A684ME15# |                    |  |
|        |               |         | ±10%    | GRM155R61A684KE15# |                    |                    |                    |  |
|        |               |         |         | ±20%               | GRM155R61A684ME15# |                    |                    |  |
|        |               | B       | 0.15μF  | ±10%               | GRM155B31A154KE18# |                    |                    |  |
|        |               |         |         | ±20%               | GRM155B31A154ME18# |                    |                    |  |
|        |               |         | 0.22μF  | ±10%               | GRM155B31A224KE18# |                    |                    |  |
|        |               |         |         | ±20%               | GRM155B31A224ME18# |                    |                    |  |
|        |               |         | 0.33μF  | ±10%               | GRM155B31A334KE14# |                    |                    |  |
|        |               |         |         | ±20%               | GRM155B31A334ME14# |                    |                    |  |

| T max. | Rated Voltage | TC Code | Cap.   | Tol.               | Part Number        |                    |                    |                    |    |
|--------|---------------|---------|--------|--------------------|--------------------|--------------------|--------------------|--------------------|----|
| 0.55mm | 10Vdc         | B       | 0.47µF | ±10%               | GRM155B31A474KE14# |                    |                    |                    |    |
|        |               |         |        | ±20%               | GRM155B31A474ME14# |                    |                    |                    |    |
|        |               |         | 0.68µF | ±10%               | GRM155B31A684KE15# |                    |                    |                    |    |
|        |               |         |        | ±20%               | GRM155B31A684ME15# |                    |                    |                    |    |
|        |               |         | 1.0µF  | ±20%               | GRM155B31A105ME01# |                    |                    |                    |    |
|        |               |         |        | 2.2µF              | ±10%               | GRM155B31A225KE95# | D1                 |                    |    |
|        |               |         | ±20%   |                    | GRM155B31A225ME95# | D1                 |                    |                    |    |
|        |               | 6.3Vdc  | X7R    | 1.0µF              | ±10%               | GRM155R70J105KA12# | D1                 |                    |    |
|        |               |         |        |                    | ±20%               | GRM155R70J105MA12# | D1                 |                    |    |
|        |               |         |        | X6S                | 0.22µF             | ±10%               | GRM155C80J224KE01# |                    |    |
|        |               |         |        |                    |                    | ±20%               | GRM155C80J224ME01# |                    |    |
|        |               |         | 2.2µF  |                    | ±10%               | GRM155C80J225KE95# | D1                 |                    |    |
|        | ±20%          |         |        |                    | GRM155C80J225ME95# | D1                 |                    |                    |    |
|        | X5R           |         | 0.10µF | ±10%               | GRM155R60J104KA01# |                    |                    |                    |    |
|        |               |         |        | ±20%               | GRM155R60J104MA01# |                    |                    |                    |    |
|        |               |         | 0.15µF | ±10%               | GRM155R60J154KE01# |                    |                    |                    |    |
|        |               |         |        | ±20%               | GRM155R60J154ME01# |                    |                    |                    |    |
|        |               |         | 0.22µF | ±10%               | GRM155R60J224KE01# |                    |                    |                    |    |
|        |               |         |        | ±20%               | GRM155R60J224ME01# |                    |                    |                    |    |
|        |               |         | 0.33µF | ±10%               | GRM155R60J334KE01# |                    |                    |                    |    |
|        |               |         |        | ±20%               | GRM155R60J334ME01# |                    |                    |                    |    |
|        |               |         | 0.47µF | ±10%               | GRM155R60J474KE19# |                    |                    |                    |    |
|        |               |         |        | ±20%               | GRM155R60J474ME19# |                    |                    |                    |    |
|        |               |         | 0.68µF | ±10%               | GRM155R60J684KE19# |                    |                    |                    |    |
|        |               |         |        | ±20%               | GRM155R60J684ME19# |                    |                    |                    |    |
|        |               |         | 1.0µF  | ±20%               | GRM155R60J105ME19# |                    |                    |                    |    |
|        |               |         |        |                    |                    |                    |                    |                    |    |
|        |               |         | B      | 0.15µF             | ±10%               | GRM155B10J154KE01# |                    |                    |    |
|        |               |         |        |                    | ±20%               | GRM155B10J154ME01# |                    |                    |    |
|        | 0.22µF        |         |        | ±10%               | GRM155B10J224KE01# |                    |                    |                    |    |
|        |               |         |        | ±20%               | GRM155B10J224ME01# |                    |                    |                    |    |
|        | 0.33µF        |         |        | ±10%               | GRM155B10J334KE01# |                    |                    |                    |    |
|        |               |         |        | ±20%               | GRM155B10J334ME01# |                    |                    |                    |    |
|        | 0.47µF        |         |        | ±10%               | GRM155B30J474KE18# |                    |                    |                    |    |
|        |               |         |        | ±20%               | GRM155B30J474ME18# |                    |                    |                    |    |
|        | 0.68µF        |         |        | ±10%               | GRM155B30J684KE18# |                    |                    |                    |    |
|        |               |         |        | ±20%               | GRM155B30J684ME18# |                    |                    |                    |    |
|        | 1.0µF         |         |        | ±20%               | GRM155B30J105ME18# |                    |                    |                    |    |
|        |               |         |        | ±10%               | GRM155B30J225KE95# |                    |                    |                    |    |
|        |               |         | ±20%   | GRM155B30J225ME95# |                    |                    |                    |                    |    |
|        | 4Vdc          |         | X7R    | 1.0µF              | ±10%               | GRM155R70G105KA12# |                    |                    |    |
|        |               |         |        |                    | ±20%               | GRM155R70G105MA12# |                    |                    |    |
|        |               |         | X6S    | 0.22µF             | ±10%               | GRM155C80G224KE01# |                    |                    |    |
|        |               |         |        |                    | ±20%               | GRM155C80G224ME01# |                    |                    |    |
|        |               |         | X5R    | 1.0µF              | ±20%               | GRM155R60G105ME01# |                    |                    |    |
|        |               |         |        |                    |                    |                    |                    |                    |    |
|        |               |         | 0.6mm  | 35Vdc              | X5R                | 1.0µF              | ±10%               | GRM155R6YA105KE11# | D1 |
|        |               |         |        |                    |                    |                    | ±20%               | GRM155R6YA105ME11# | D1 |
|        |               |         |        | 25Vdc              | X6S                | 1.0µF              | ±10%               | GRM155C81E105KE11# | D1 |
|        |               | ±20%    |        |                    |                    |                    | GRM155C81E105ME11# | D1                 |    |
|        | 16Vdc         | X6S     |        | 1.0µF              | ±10%               | GRM155C81C105KE11# |                    |                    |    |
|        |               |         |        |                    | ±20%               | GRM155C81C105ME11# |                    |                    |    |
|        | 6.3Vdc        | X5R     |        | 4.7µF              | ±20%               | GRM155R60J475ME47# | D1                 |                    |    |
|        |               |         |        |                    | B                  | 4.7µF              | ±20%               | GRM155B30J475ME47# | D1 |
|        | 4Vdc          | X5R     |        | 4.7µF              | ±20%               | GRM155R60G475ME47# |                    |                    |    |
|        |               |         |        |                    | B                  | 4.7µF              | ±20%               | GRM155B30G475ME47# |    |

Part number # indicates the package specification code.

## GRM Series High Dielectric Constant Type Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol. | Part Number        |           |
|--------|---------------|---------|-------|------|--------------------|-----------|
| 0.6mm  | 2.5Vdc        | X6T     | 4.7μF | ±20% | GRM155D80E475ME47# | <b>D1</b> |
| 0.65mm | 10Vdc         | X5R     | 4.7μF | ±20% | GRM155R61A475MEAA# | <b>D1</b> |
|        | 6.3Vdc        | X6S     | 4.7μF | ±20% | GRM155C80J475MEAA# | <b>D1</b> |
| 0.7mm  | 25Vdc         | X5R     | 2.2μF | ±10% | GRM155R61E225KE11# |           |
|        |               |         |       | ±20% | GRM155R61E225ME11# |           |
|        | 16Vdc         | X6S     | 2.2μF | ±10% | GRM155C81C225KE11# |           |
|        |               |         |       | ±20% | GRM155C81C225ME11# |           |
|        |               | X5R     | 2.2μF | ±10% | GRM155R61C225KE11# |           |
|        |               |         |       | ±20% | GRM155R61C225ME11# |           |
|        | 10Vdc         | X7S     | 2.2μF | ±10% | GRM155C71A225KE11# |           |
|        |               |         |       | ±20% | GRM155C71A225ME11# |           |
|        |               | X6S     | 2.2μF | ±10% | GRM155C81A225KE11# |           |
|        |               |         |       | ±20% | GRM155C81A225ME11# |           |
|        | 6.3Vdc        | X7S     | 2.2μF | ±10% | GRM155C70J225KE11# |           |
|        |               |         |       | ±20% | GRM155C70J225ME11# |           |
|        | 4Vdc          | X5R     | 10μF  | ±20% | GRM155R60G106ME44# |           |
|        | 2.5Vdc        | X5R     | 10μF  | ±20% | GRM155R60E106ME16# |           |

1.6×0.8mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |           |
|--------|---------------|---------|--------|------|--------------------|-----------|
| 0.5mm  | 25Vdc         | X5R     | 1.0μF  | ±10% | GRM185R61E105KA12# | <b>D1</b> |
|        |               |         |        | ±20% | GRM185R61E105MA12# | <b>D1</b> |
|        |               | B       | 1.0μF  | ±10% | GRM185B31E105KA12# | <b>D1</b> |
|        |               |         |        | ±20% | GRM185B31E105MA12# | <b>D1</b> |
|        | 16Vdc         | X5R     | 1.0μF  | ±10% | GRM185R61C105KE44# |           |
|        |               |         |        | ±20% | GRM185R61C105ME44# |           |
|        |               | B       | 1.0μF  | ±10% | GRM185B31C105KE43# |           |
|        |               |         |        | ±20% | GRM185B31C105ME43# |           |
|        | 6.3Vdc        | X5R     | 10μF   | ±20% | GRM185R60J106ME15# | <b>D1</b> |
|        | 4Vdc          | X5R     | 10μF   | ±20% | GRM185R60G106ME15# |           |
| 0.55mm | 16Vdc         | X5R     | 4.7μF  | ±10% | GRM185R61C475KE11# |           |
|        |               |         |        | ±20% | GRM185R61C475ME11# |           |
|        | 10Vdc         | X6S     | 4.7μF  | ±10% | GRM185C81A475KE11# | <b>D1</b> |
|        |               |         |        | ±20% | GRM185C81A475ME11# | <b>D1</b> |
|        |               | X5R     | 4.7μF  | ±10% | GRM185R61A475KE11# |           |
|        |               |         |        | ±20% | GRM185R61A475ME11# |           |
|        | 6.3Vdc        | X7T     | 4.7μF  | ±20% | GRM185D70J475ME11# | <b>D1</b> |
|        |               | X6S     | 4.7μF  | ±20% | GRM185C80J475ME11# |           |
| 0.9mm  | 250Vdc        | X7R     | 220pF  | ±10% | GRM188R72E221KW07# |           |
|        |               |         | 330pF  | ±10% | GRM188R72E331KW07# |           |
|        |               |         | 470pF  | ±10% | GRM188R72E471KW07# |           |
|        |               |         | 680pF  | ±10% | GRM188R72E681KW07# |           |
|        |               |         | 1000pF | ±10% | GRM188R72E102KW07# |           |
|        |               |         | 1500pF | ±10% | GRM188R72E152KW07# |           |
|        |               |         | 2200pF | ±10% | GRM188R72E222KW07# |           |
|        | 200Vdc        | X7R     | 220pF  | ±10% | GRM188R72D221KW07# |           |
|        |               |         | 330pF  | ±10% | GRM188R72D331KW07# |           |
|        |               |         | 470pF  | ±10% | GRM188R72D471KW07# |           |
|        |               |         | 680pF  | ±10% | GRM188R72D681KW07# |           |
|        |               |         | 1000pF | ±10% | GRM188R72D102KW07# |           |
|        |               |         | 1500pF | ±10% | GRM188R72D152KW07# |           |
|        |               |         | 2200pF | ±10% | GRM188R72D222KW07# |           |

| T max. | Rated Voltage | TC Code            | Cap.               | Tol.               | Part Number        |                    |    |
|--------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|----|
| 0.9mm  | 50Vdc         | X5R                | 1.0μF              | ±10%               | GRM188R61H105KAAL# |                    |    |
|        |               |                    |                    | ±20%               | GRM188R61H105MAAL# |                    |    |
|        |               | B                  | 1.0μF              | ±10%               | GRM188B31H105KAAL# |                    |    |
|        |               |                    |                    | ±20%               | GRM188B31H105MAAL# |                    |    |
|        | 35Vdc         | X7R                | 0.47μF             | ±10%               | GRM188R7YA474KE05# |                    |    |
|        |               |                    |                    | ±20%               | GRM188R7YA474ME05# |                    |    |
|        | 25Vdc         | X7R                | 1.0μF              | ±10%               | GRM188R71E105KA12# |                    |    |
|        |               |                    |                    | ±20%               | GRM188R71E105MA12# |                    |    |
|        |               | X5R                | 1.0μF              | ±10%               | GRM188R61E105KA12# |                    |    |
|        |               |                    |                    | ±20%               | GRM188R61E105MA12# |                    |    |
|        |               |                    | 2.2μF              | ±10%               | GRM188R61E225KA12# |                    |    |
|        |               |                    |                    | ±20%               | GRM188R61E225MA12# |                    |    |
|        |               | B                  | 1.0μF              | ±10%               | GRM188B31E105KA75# |                    |    |
|        |               |                    |                    | ±20%               | GRM188B31E105MA75# |                    |    |
|        |               |                    | 2.2μF              | ±10%               | GRM188B31E225KA12# |                    |    |
|        |               |                    |                    | ±20%               | GRM188B31E225MA12# |                    |    |
|        | 16Vdc         | X7R                | 1.0μF              | ±10%               | GRM188R71C105KE15# |                    |    |
|        |               |                    |                    | ±20%               | GRM188R71C105ME15# |                    |    |
|        |               | X6S                | 2.2μF              | ±10%               | GRM188C81C225KA12# |                    |    |
|        |               |                    |                    | ±20%               | GRM188C81C225MA12# |                    |    |
|        |               | X5R                | 1.0μF              | ±10%               | GRM188R61C105KA93# |                    |    |
|        |               |                    |                    | ±20%               | GRM188R61C105MA93# |                    |    |
|        |               |                    | 2.2μF              | ±10%               | GRM188R61C225KE15# |                    |    |
|        |               | B                  | 1.0μF              | ±10%               | GRM188B31C105KA92# |                    |    |
|        |               |                    |                    | ±20%               | GRM188B31C105MA92# |                    |    |
|        |               |                    | 2.2μF              | ±10%               | GRM188B31C225KE14# |                    |    |
|        |               | 10Vdc              | X7R                | 2.2μF              | ±10%               | GRM188R71A225KE15# |    |
|        |               |                    |                    |                    | ±20%               | GRM188R71A225ME15# |    |
|        | X5R           |                    | 4.7μF              | ±10%               | GRM188R61A475KE15# | D1                 |    |
|        |               |                    |                    | ±20%               | GRM188R61A475ME15# | D1                 |    |
|        | 6.3Vdc        |                    | X6S                | 4.7μF              | ±20%               | GRM188C80J475ME15# | D1 |
|        |               |                    | X5R                | 10μF               | ±20%               | GRM188R60J106ME47# |    |
| B      |               | 10μF               | ±20%               | GRM188B30J106ME47# |                    |                    |    |
| 4Vdc   | X5R           | 10μF               | ±20%               | GRM188R60G106ME47# |                    |                    |    |
| 0.95mm | 25Vdc         | X5R                | 4.7μF              | ±10%               | GRM188R61E475KE11# |                    |    |
|        |               |                    |                    | ±20%               | GRM188R61E475ME11# |                    |    |
|        | 16Vdc         | X6S                | 4.7μF              | ±10%               | GRM188C81C475KE11# |                    |    |
|        |               |                    |                    | ±20%               | GRM188C81C475ME11# |                    |    |
|        |               | X5R                | 4.7μF              | ±10%               | GRM188R61C475KE11# |                    |    |
|        |               |                    |                    | ±20%               | GRM188R61C475ME11# |                    |    |
|        | 10μF          |                    | ±10%               | GRM188R61C106KAAL# |                    |                    |    |
|        | ±20%          | GRM188R61C106MAAL# |                    |                    |                    |                    |    |
|        | B             | 4.7μF              | ±10%               | GRM188B31C475KAAJ# | D1                 |                    |    |
|        |               |                    | ±20%               | GRM188B31C475MAAJ# | D1                 |                    |    |
|        |               | 10Vdc              | X7S                | 4.7μF              | ±10%               | GRM188C71A475KE11# |    |
|        |               |                    |                    |                    | ±20%               | GRM188C71A475ME11# |    |
|        | X5R           |                    | 10μF               | ±10%               | GRM188R61A106KAAL# |                    |    |
|        |               |                    |                    | ±20%               | GRM188R61A106MAAL# |                    |    |
| B      | 10μF          | ±20%               | GRM188B31A106ME69# | D1                 |                    |                    |    |
| 1.0mm  | 50Vdc         | X5R                | 2.2μF              | ±10%               | GRM188R61H225KE11# |                    |    |
|        |               |                    |                    | ±20%               | GRM188R61H225ME11# |                    |    |
|        | 35Vdc         | X6S                | 2.2μF              | ±10%               | GRM188C8YA225KE11# |                    |    |
|        |               |                    |                    | ±20%               | GRM188C8YA225ME11# |                    |    |
|        |               | X5R                | 4.7μF              | ±10%               | GRM188R6YA475KE15# |                    |    |

Part number # indicates the package specification code.

## GRM Series High Dielectric Constant Type Part Number List

(→ 1.6×0.8mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol. | Part Number        |           |
|--------|---------------|---------|-------|------|--------------------|-----------|
| 1.0mm  | 35Vdc         | X5R     | 4.7μF | ±20% | GRM188R6YA475ME15# |           |
|        |               | X7S     | 2.2μF | ±10% | GRM188C71E225KE11# |           |
|        |               |         |       | ±20% | GRM188C71E225ME11# |           |
|        |               |         |       |      |                    |           |
|        |               | X6S     | 2.2μF | ±10% | GRM188C81E225KE11# |           |
|        |               |         |       | ±20% | GRM188C81E225ME11# |           |
|        |               |         |       |      |                    |           |
|        |               |         | 4.7μF | ±10% | GRM188C81E475KE11# | <b>D1</b> |
|        |               |         |       | ±20% | GRM188C81E475ME11# | <b>D1</b> |
|        |               |         |       |      |                    |           |
|        | 16Vdc         | X5R     | 10μF  | ±20% | GRM188R61E106MA73# |           |
|        |               | X7S     | 2.2μF | ±10% | GRM188C71C225KE11# |           |
|        |               |         |       | ±20% | GRM188C71C225ME11# |           |
|        |               | X6S     | 10μF  | ±20% | GRM188C81C106MA73# |           |
|        | 10Vdc         | X7T     | 10μF  | ±20% | GRM188D71A106MA73# |           |
|        | 6.3Vdc        | X7T     | 10μF  | ±20% | GRM188D70J106MA73# |           |
|        |               | X5R     | 22μF  | ±20% | GRM188R60J226MEA0# | <b>D1</b> |
|        |               | B       | 22μF  | ±20% | GRM188B30J226MEA0# | <b>D1</b> |
|        | 4Vdc          | X6S     | 22μF  | ±20% | GRM188C80G226MEA0# | <b>D1</b> |
|        |               | X5R     | 22μF  | ±20% | GRM188R60G226MEA0# |           |
|        |               | B       | 22μF  | ±20% | GRM188B30G226MEA0# |           |

2.0×1.25mm

| T max. | Rated Voltage | TC Code | Cap.  | Tol. | Part Number        |           |
|--------|---------------|---------|-------|------|--------------------|-----------|
| 0.7mm  | 16Vdc         | X6S     | 1.0μF | ±10% | GRM216C81C105KA12# |           |
| 0.95mm | 50Vdc         | X5R     | 1.0μF | ±10% | GRM219R61H105KA73# |           |
|        |               |         |       | ±20% | GRM219R61H105MA73# |           |
|        |               |         | 2.2μF | ±10% | GRM219R61H225KE15# |           |
|        |               |         |       | ±20% | GRM219R61H225ME15# |           |
|        |               | B       | 1.0μF | ±10% | GRM219B31H105KA73# |           |
|        |               |         |       | ±20% | GRM219B31H105MA73# |           |
|        |               |         | 2.2μF | ±10% | GRM219B31H225KE15# |           |
|        |               |         |       | ±20% | GRM219B31H225ME15# |           |
|        |               |         |       |      |                    |           |
|        | 35Vdc         | X6S     | 2.2μF | ±10% | GRM219C8YA225KE15# |           |
|        |               |         |       | ±20% | GRM219C8YA225ME15# |           |
|        |               | X5R     | 4.7μF | ±10% | GRM219R6YA475KA73# | <b>D1</b> |
|        |               |         |       | ±20% | GRM219R6YA475MA73# | <b>D1</b> |
|        | 25Vdc         | X7R     | 1.0μF | ±10% | GRM219R71E105KA88# |           |
|        |               |         |       |      |                    |           |
|        |               | X6S     | 2.2μF | ±10% | GRM219C81E225KE15# |           |
|        |               |         |       | ±20% | GRM219C81E225ME15# |           |
|        |               | X5R     | 2.2μF | ±10% | GRM219R61E225KA12# |           |
|        |               |         |       | ±20% | GRM219R61E225MA12# |           |
|        |               |         | 4.7μF | ±10% | GRM219R61E475KA73# |           |
|        |               |         |       | ±20% | GRM219R61E475MA73# |           |
|        |               | 10μF    |       | ±10% | GRM219R61E106KA12# | <b>D1</b> |
|        |               |         |       | ±20% | GRM219R61E106MA12# | <b>D1</b> |
|        |               |         | 2.2μF | ±10% | GRM219B31E225KA75# |           |
|        |               |         |       | ±20% | GRM219B31E225MA75# |           |
|        |               | 10μF    |       | ±10% | GRM219B31E106KA12# | <b>D1</b> |
|        |               |         |       | ±20% | GRM219B31E106MA12# | <b>D1</b> |
|        | 16Vdc         | X7R     | 2.2μF | ±10% | GRM219R71C225KE15# |           |
|        |               |         |       | ±20% | GRM219R71C225ME15# |           |
|        |               |         |       |      |                    |           |
|        |               | X5R     | 4.7μF | ±10% | GRM219R61C475KE15# |           |
|        |               |         |       | ±10% | GRM219R61C106KA73# |           |
|        |               |         |       | ±20% | GRM219R61C106MA73# |           |

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |           |
|--------|---------------|---------|--------|------|--------------------|-----------|
| 0.95mm | 16Vdc         | B       | 4.7μF  | ±10% | GRM219B31C475KE15# |           |
|        |               |         | 10μF   | ±10% | GRM219B31C106KA73# |           |
|        |               |         |        | ±20% | GRM219B31C106MA73# |           |
|        | 10Vdc         | X7R     | 2.2μF  | ±10% | GRM219R71A225KE15# |           |
|        |               |         |        | ±20% | GRM219R71A225ME15# |           |
|        |               |         |        |      |                    |           |
|        |               | X7T     | 4.7μF  | ±10% | GRM219D71A475KE15# | <b>D1</b> |
|        |               |         |        | ±20% | GRM219D71A475ME15# | <b>D1</b> |
|        |               |         |        |      |                    |           |
|        | 6.3Vdc        | X5R     | 22μF   | ±20% | GRM219R61A226MEA0# | <b>D1</b> |
|        |               |         |        | ±20% | GRM219B31A226MEA0# | <b>D1</b> |
|        |               |         |        |      |                    |           |
|        |               | X6S     | 10μF   | ±10% | GRM219C80J106KE39# |           |
|        |               |         |        | ±20% | GRM219C80J106ME39# |           |
|        |               |         |        |      |                    |           |
|        | 4Vdc          | X5R     | 22μF   | ±20% | GRM219R60J226MEA0# |           |
|        |               |         |        | ±20% | GRM219B30J226ME47# | <b>D1</b> |
|        |               |         |        |      |                    |           |
|        |               | X6S     | 10μF   | ±10% | GRM219C80G106KE19# |           |
|        |               |         |        | ±20% | GRM219C80G106ME19# |           |
|        |               |         |        |      |                    |           |
|        | 2.5Vdc        | X6T     | 47μF   | ±20% | GRM219D80E476ME44# |           |
|        |               |         |        |      |                    |           |
|        |               |         |        |      |                    |           |
|        |               | X7R     | 1000pF | ±10% | GRM21AR72H102KW10# |           |
|        |               |         |        | ±10% | GRM21AR72H152KW10# |           |
|        |               |         |        | ±10% | GRM21AR72H222KW10# |           |
| 1.0mm  | 500Vdc        | X7R     | 3300pF | ±10% | GRM21AR72H332KW10# |           |
|        |               |         | 4700pF | ±10% | GRM21AR72H472KW10# |           |
|        |               |         | 6800pF | ±10% | GRM21AR72H682KW10# |           |
|        |               |         |        |      |                    |           |
|        |               |         |        |      |                    |           |
|        |               |         |        |      |                    |           |
|        | 250Vdc        | X7R     | 1000pF | ±10% | GRM21AR72E102KW01# |           |
|        |               |         | 1500pF | ±10% | GRM21AR72E152KW01# |           |
|        |               |         | 2200pF | ±10% | GRM21AR72E222KW01# |           |
|        |               |         | 3300pF | ±10% | GRM21AR72E332KW01# |           |
|        |               |         | 4700pF | ±10% | GRM21AR72E472KW01# |           |
|        |               |         | 6800pF | ±10% | GRM21AR72E682KW01# |           |
|        | 200Vdc        | X7R     | 1000pF | ±10% | GRM21AR72D102KW01# |           |
|        |               |         | 1500pF | ±10% | GRM21AR72D152KW01# |           |
|        |               |         | 2200pF | ±10% | GRM21AR72D222KW01# |           |
|        |               |         | 3300pF | ±10% | GRM21AR72D332KW01# |           |
|        |               |         | 4700pF | ±10% | GRM21AR72D472KW01# |           |
|        |               |         | 6800pF | ±10% | GRM21AR72D682KW01# |           |
|        | 35Vdc         | X6S     | 4.7μF  | ±10% | GRM219C8YA475KE21# | <b>D1</b> |
|        |               |         |        | ±20% | GRM219C8YA475ME21# | <b>D1</b> |
|        | 25Vdc         | X7S     | 4.7μF  | ±10% | GRM219C71E475KE21# | <b>D1</b> |
|        |               |         |        | ±20% | GRM219C71E475ME21# | <b>D1</b> |
|        |               | X6S     | 4.7μF  | ±10% | GRM219C81E475KE21# | <b>D1</b> |
|        |               |         |        | ±20% | GRM219C81E475ME21# | <b>D1</b> |
|        | 16Vdc         | X7S     | 4.7μF  | ±10% | GRM219C71C475KE21# |           |
|        |               |         |        | ±20% | GRM219C71C475ME21# |           |
|        |               | X5R     | 22μF   | ±20% | GRM219R61C226ME15# | <b>D1</b> |
|        |               |         |        |      |                    |           |
| 1.35mm | 50Vdc         | X5R     | 1.0μF  | ±10% | GRM21BR61H105KA12# |           |
|        |               |         |        |      |                    |           |
|        |               | B       | 1.0μF  | ±10% | GRM21BB31H105KA12# |           |
|        |               |         |        | ±20% | GRM21BB31H105MA12# |           |
|        |               |         |        | ±10% | GRM21BC81E475KA12# |           |
|        |               |         |        | ±20% | GRM21BC81E475MA12# |           |
|        | 25Vdc         | X6S     | 4.7μF  | ±10% | GRM21BC81E475KA12# |           |
|        |               |         |        | ±20% | GRM21BC81E475MA12# |           |
|        |               | X5R     | 4.7μF  | ±10% | GRM21BR61E475KA12# |           |
|        |               |         |        | ±20% | GRM21BR61E475MA12# |           |
|        |               | B       | 2.2μF  | ±10% | GRM21BB31E225KA75# |           |
|        |               |         |        | ±20% | GRM21BB31E225MA75# |           |
|        |               |         | 4.7μF  | ±10% | GRM21BB31E475KA75# |           |
|        |               |         |        |      |                    |           |

Part number # indicates the package specification code.

## GRM Series High Dielectric Constant Type Part Number List

(→ 2.0×1.25mm)

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |    |
|--------|---------------|---------|---------|------|--------------------|----|
| 1.35mm | 25Vdc         | B       | 4.7μF   | ±20% | GRM21BB31E475MA75# |    |
|        |               | X7R     | 2.2μF   | ±10% | GRM21BR71C225KA12# |    |
|        | 16Vdc         |         |         | ±20% | GRM21BR71C225MA12# |    |
|        |               |         |         |      |                    |    |
|        |               | X5R     | 10μF    | ±10% | GRM21BR61C106KE15# |    |
|        |               |         |         | ±20% | GRM21BR61C106ME15# |    |
|        |               | B       | 10μF    | ±10% | GRM21BB31C106KE15# |    |
|        |               |         |         | ±20% | GRM21BB31C106ME15# |    |
|        | 50Vdc         | X5R     | 2.2μF   | ±10% | GRM21BR61H225KA73# |    |
|        |               |         |         | ±20% | GRM21BR61H225MA73# |    |
|        |               |         | 4.7μF   | ±10% | GRM21BR61H475KE51# |    |
|        |               |         |         | ±20% | GRM21BR61H475ME51# |    |
|        |               | B       | 2.2μF   | ±10% | GRM21BB31H225KA73# |    |
|        |               |         |         | ±20% | GRM21BB31H225MA73# |    |
|        |               |         | 4.7μF   | ±10% | GRM21BB31H475KE51# |    |
|        |               |         |         | ±20% | GRM21BB31H475ME51# |    |
|        |               | X7R     | 1.0μF   | ±10% | GRM21BR71E105KA99# |    |
|        |               |         |         | ±10% | GRM21BR71E225KE11# |    |
|        |               |         | 2.2μF   | ±10% | GRM21BR71E225ME11# |    |
|        |               |         |         | ±20% | GRM21BR71E225ME11# |    |
|        |               | 4.7μF   |         | ±10% | GRM21BR71E475KA73# | D1 |
|        |               |         |         | ±20% | GRM21BR71E475MA73# | D1 |
|        |               | R       | 1.0μF   | ±10% | GRM21BR11E105KA99# |    |
|        |               | X5R     | 10μF    | ±10% | GRM21BR61E106KA73# |    |
|        |               |         |         | ±20% | GRM21BR61E106MA73# |    |
|        |               | B       | 10μF    | ±10% | GRM21BB31E106KA73# |    |
|        |               |         |         | ±20% | GRM21BB31E106MA73# |    |
| 1.4mm  | 25Vdc         | X7R     | 1.0μF   | ±10% | GRM21BR71E105KA99# |    |
|        |               |         |         | ±10% | GRM21BR71E225KE11# |    |
|        |               |         | 2.2μF   | ±10% | GRM21BR71E225ME11# |    |
|        |               |         |         | ±20% | GRM21BR71E225ME11# |    |
|        |               | 4.7μF   |         | ±10% | GRM21BR71E475KA73# | D1 |
|        |               |         |         | ±20% | GRM21BR71E475MA73# | D1 |
|        | 16Vdc         | X7R     | 4.7μF   | ±10% | GRM21BR71C475KA73# |    |
|        |               |         |         | ±20% | GRM21BR71C475MA73# |    |
|        |               | X6S     | 10μF    | ±10% | GRM21BC81C106KA73# |    |
|        |               |         |         | ±20% | GRM21BC81C106MA73# |    |
|        |               | X7R     | 4.7μF   | ±10% | GRM21BR71A475KA73# |    |
|        |               |         |         | ±20% | GRM21BR71A475MA73# |    |
|        |               | 10μF    |         | ±10% | GRM21BR71A106KE51# |    |
|        |               |         |         | ±20% | GRM21BR71A106ME51# |    |
|        |               | B       | 22μF    | ±20% | GRM21BB31A226ME51# | D1 |
|        |               |         |         |      |                    |    |
|        | 6.3Vdc        | X7R     | 10μF    | ±10% | GRM21BR70J106KE76# |    |
|        |               |         |         | ±20% | GRM21BR70J106ME76# |    |
|        |               | X6S     | 22μF    | ±20% | GRM21BC80J226ME51# | D1 |
|        |               |         |         |      |                    |    |
|        | 4Vdc          | X7U     | 22μF    | ±20% | GRM21BE70G226ME51# |    |
|        |               |         |         |      |                    |    |
|        |               | X6S     | 22μF    | ±20% | GRM21BC80G226ME39# |    |
|        |               |         |         |      |                    |    |
| 1.45mm | 500Vdc        | X7R     | 10000pF | ±10% | GRM21BR72H103KW09# |    |
|        |               |         |         |      |                    |    |
|        |               |         |         |      |                    |    |
|        |               |         |         |      |                    |    |
|        | 250Vdc        | X7R     | 10000pF | ±10% | GRM21BR72E103KW03# |    |
|        |               |         |         |      |                    |    |
|        |               |         |         | ±10% | GRM21BR72E153KW03# |    |
|        |               |         |         | ±10% | GRM21BR72E223KW03# |    |
|        | 200Vdc        | X7R     | 10000pF | ±10% | GRM21BR72D103KW03# |    |
|        |               |         |         |      |                    |    |
|        |               |         |         | ±10% | GRM21BR72D153KW03# |    |
|        |               |         |         | ±10% | GRM21BR72D223KW03# |    |
|        | 50Vdc         | X7S     | 4.7μF   | ±10% | GRM21BC71H475KE11# |    |
|        |               |         |         | ±20% | GRM21BC71H475ME11# |    |
|        |               |         |         |      |                    |    |
|        |               | X6S     | 4.7μF   | ±10% | GRM21BC81H475KE11# |    |
|        |               |         |         | ±20% | GRM21BC81H475ME11# |    |
|        |               |         |         |      |                    |    |
|        | 35Vdc         | X7S     | 4.7μF   | ±10% | GRM21BC7YA475KE11# |    |
|        |               |         |         | ±20% | GRM21BC7YA475ME11# |    |
|        |               | X6S     | 10μF    | ±10% | GRM21BC8YA106KE11# | D1 |
|        |               |         |         | ±20% | GRM21BC8YA106ME11# | D1 |

| T max. | Rated Voltage | TC Code | Cap.  | Tol. | Part Number        |    |
|--------|---------------|---------|-------|------|--------------------|----|
| 1.45mm | 35Vdc         | X5R     | 10μF  | ±10% | GRM21BR6YA106KE43# | D1 |
|        |               |         |       | ±20% | GRM21BR6YA106ME43# | D1 |
|        | 25Vdc         | X7S     | 4.7μF | ±10% | GRM21BC71E475KE11# |    |
|        |               |         |       | ±20% | GRM21BC71E475ME11# |    |
|        |               |         | 10μF  | ±10% | GRM21BC71E106KE11# | D1 |
|        |               |         |       | ±20% | GRM21BC71E106ME11# | D1 |
|        |               | X6S     | 10μF  | ±10% | GRM21BC81E106KE11# | D1 |
|        |               |         |       | ±20% | GRM21BC81E106ME11# | D1 |
|        |               | X5R     | 22μF  | ±20% | GRM21BR61E226ME44# |    |
|        |               |         |       |      |                    |    |
|        | 16Vdc         | X7S     | 10μF  | ±10% | GRM21BC71C106KE11# |    |
|        |               |         |       | ±20% | GRM21BC71C106ME11# |    |
|        |               | X6S     | 22μF  | ±20% | GRM21BC81C226ME44# | D1 |
|        |               |         |       |      |                    |    |
|        |               | X5R     | 22μF  | ±20% | GRM21BR61C226ME44# |    |
|        |               |         |       |      |                    |    |
|        | 10Vdc         | X7T     | 22μF  | ±20% | GRM21BD71A226ME44# | D1 |
|        |               |         |       |      |                    |    |
|        |               | X6S     | 22μF  | ±20% | GRM21BC81A226ME44# |    |
|        |               |         |       |      |                    |    |
|        |               | X5R     | 22μF  | ±20% | GRM21BR61A226ME44# |    |
|        |               |         |       | ±20% | GRM21BR61A476ME15# | D1 |
|        | 6.3Vdc        | X7T     | 22μF  | ±20% | GRM21BD70J226ME44# |    |
|        |               |         |       |      |                    |    |
|        |               | X5R     | 47μF  | ±20% | GRM21BR60J476ME15# | D1 |
|        |               |         |       | ±20% | GRM21BR60J107ME15# | D1 |
|        |               | B       | 47μF  | ±20% | GRM21BB30J476ME15# | D1 |
|        |               |         |       |      |                    |    |
|        | 4Vdc          | X6S     | 47μF  | ±20% | GRM21BC80G476ME15# | D1 |
|        |               |         |       | ±20% | GRM21BC80G107ME15# | D1 |
|        |               | X5R     | 47μF  | ±20% | GRM21BR60G476ME15# |    |
|        |               |         |       | ±20% | GRM21BB30G476ME15# |    |
|        |               | B       | 47μF  | ±20% | GRM21BB30G476ME15# |    |
|        |               |         |       |      |                    |    |
|        | 2.5Vdc        | X6S     | 100μF | ±20% | GRM21BC80E107ME15# |    |

### 3.2×1.6mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |    |
|--------|---------------|---------|--------|------|--------------------|----|
| 0.95mm | 35Vdc         | X5R     | 10μF   | ±10% | GRM319R6YA106KA12# | D1 |
|        |               |         |        | ±20% | GRM319R6YA106MA12# | D1 |
|        | 16Vdc         | X5R     | 10μF   | ±10% | GRM319R61C106KE15# |    |
|        |               |         |        | ±20% | GRM319R61C106ME15# |    |
|        |               |         | 22μF   | ±20% | GRM319R61C226ME15# | D1 |
|        |               |         |        |      |                    |    |
|        |               | B       | 10μF   | ±10% | GRM319B31C106KE15# |    |
|        |               |         |        | ±20% | GRM319B31C106ME15# |    |
|        | 10Vdc         | X5R     | 22μF   | ±20% | GRM319R61A226ME15# |    |
|        |               |         |        | ±20% | GRM319B31A226ME15# |    |
|        |               | X6S     | 22μF   | ±20% | GRM319C80J226ME15# |    |
|        |               |         |        |      |                    |    |
| 1.0mm  | 630Vdc        | X7R     | 1000pF | ±10% | GRM31AR72J102KW01# |    |
|        |               |         |        | ±10% | GRM31AR72J152KW01# |    |
|        |               |         | 2200pF | ±10% | GRM31AR72J222KW01# |    |
|        |               |         |        | ±10% | GRM31AR72J332KW01# |    |
|        |               |         | 4700pF | ±10% | GRM31AR72J472KW01# |    |
|        |               |         |        | ±10% | GRM31AR72J682KW01# |    |
|        | 1000Vdc       | X7R     | 470pF  | ±10% | GRM31BR73A471KW01# |    |
|        |               |         |        | ±10% | GRM31BR73A681KW01# |    |
|        |               |         | 680pF  | ±10% | GRM31BR73A681KW01# |    |
|        |               |         |        | ±10% | GRM31BR73A102KW01# |    |
|        |               |         | 1000pF | ±10% | GRM31BR73A102KW01# |    |
|        |               |         |        |      |                    |    |

Part number # indicates the package specification code.

## GRM Series High Dielectric Constant Type Part Number List

(→ 3.2×1.6mm)

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 1.25mm | 1000Vdc       | X7R     | 1500pF  | ±10% | GRM31BR73A152KW01# |  |
|        |               |         | 2200pF  | ±10% | GRM31BR73A222KW01# |  |
|        |               |         | 3300pF  | ±10% | GRM31BR73A332KW01# |  |
|        |               |         | 4700pF  | ±10% | GRM31BR73A472KW01# |  |
|        | 630Vdc        | X7R     | 6800pF  | ±10% | GRM31BR72J682KW01# |  |
|        | 500Vdc        | X7R     | 15000pF | ±10% | GRM31BR72H153KW10# |  |
|        |               |         | 22000pF | ±10% | GRM31BR72H223KW10# |  |
|        | 250Vdc        | X7R     | 15000pF | ±10% | GRM31BR72E153KW01# |  |
|        |               |         | 22000pF | ±10% | GRM31BR72E223KW01# |  |
|        |               |         | 68000pF | ±10% | GRM31BR72E683KW01# |  |
|        | 200Vdc        | X7R     | 15000pF | ±10% | GRM31BR72D153KW01# |  |
|        |               |         | 22000pF | ±10% | GRM31BR72D223KW01# |  |
|        |               |         | 68000pF | ±10% | GRM31BR72D683KW01# |  |
|        | 50Vdc         | X7R     | 1.0μF   | ±10% | GRM31MR71H105KA88# |  |
|        |               | B       | 1.0μF   | ±10% | GRM31MB31H105KA87# |  |
|        | 25Vdc         | X5R     | 10μF    | ±20% | GRM31MR61E106MA12# |  |
| 1.8mm  | 1000Vdc       | X7R     | 6800pF  | ±10% | GRM31CR73A682KW03# |  |
|        |               |         | 10000pF | ±10% | GRM31CR73A103KW03# |  |
|        | 630Vdc        | X7R     | 15000pF | ±10% | GRM31CR72J153KW03# |  |
|        |               |         | 22000pF | ±10% | GRM31CR72J223KW03# |  |
|        | 500Vdc        | X7R     | 33000pF | ±10% | GRM31CR72H333KW09# |  |
|        |               |         | 47000pF | ±10% | GRM31CR72H473KW09# |  |
|        | 250Vdc        | X7R     | 33000pF | ±10% | GRM31CR72E333KW03# |  |
|        |               |         | 47000pF | ±10% | GRM31CR72E473KW03# |  |
|        |               |         | 0.10μF  | ±10% | GRM31CR72E104KW03# |  |
|        | 200Vdc        | X7R     | 33000pF | ±10% | GRM31CR72D333KW03# |  |
|        |               |         | 47000pF | ±10% | GRM31CR72D473KW03# |  |
|        |               |         | 0.10μF  | ±10% | GRM31CR72D104KW03# |  |
|        | 100Vdc        | X7R     | 1.0μF   | ±10% | GRM31CR72A105KA01# |  |
|        | 50Vdc         | X7R     | 2.2μF   | ±10% | GRM31CR71H225KA88# |  |
|        |               |         | 4.7μF   | ±10% | GRM31CR71H475KA12# |  |
|        |               |         |         | ±20% | GRM31CR71H475MA12# |  |
|        |               | X5R     | 10μF    | ±10% | GRM31CR61H106KA12# |  |
|        |               |         |         | ±20% | GRM31CR61H106MA12# |  |
|        |               | B       | 2.2μF   | ±10% | GRM31CB31H225KA87# |  |
|        |               |         |         | ±20% | GRM31CB31H225MA87# |  |
|        |               |         | 4.7μF   | ±10% | GRM31CB31H475KA12# |  |
|        |               |         |         | ±20% | GRM31CB31H475MA12# |  |
|        |               |         | 10μF    | ±10% | GRM31CB31H106KA12# |  |
|        |               |         |         | ±20% | GRM31CB31H106MA12# |  |
|        | 25Vdc         | X7R     | 4.7μF   | ±10% | GRM31CR71E475KA88# |  |
|        |               |         | 10μF    | ±10% | GRM31CR71E106KA12# |  |
|        |               |         |         | ±20% | GRM31CR71E106MA12# |  |
|        |               | X5R     | 22μF    | ±20% | GRM31CR61E226ME15# |  |
|        |               |         |         | ±20% | GRM31CB31E106KA75# |  |
|        |               | B       | 10μF    | ±10% | GRM31CB31E106KA75# |  |
|        |               |         |         | ±20% | GRM31CB31E226ME15# |  |
|        | 16Vdc         | X7R     | 4.7μF   | ±20% | GRM31CR71C475MA01# |  |
|        |               | X6S     | 22μF    | ±20% | GRM31CC81C226ME15# |  |
|        |               | X5R     | 22μF    | ±20% | GRM31CR61C226ME15# |  |
|        |               | B       | 22μF    | ±20% | GRM31CB31C226ME15# |  |
|        | 10Vdc         | X7R     | 22μF    | ±20% | GRM31CR71A226ME15# |  |
|        |               | X5R     | 47μF    | ±20% | GRM31CR61A476ME15# |  |
|        |               | B       | 47μF    | ±20% | GRM31CB31A476ME15# |  |
|        |               |         |         | ±20% | GRM31CB31A476ME15# |  |
|        | 6.3Vdc        | X7R     | 22μF    | ±20% | GRM31CR70J226ME19# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol. | Part Number        |    |
|--------|---------------|---------|-------|------|--------------------|----|
| 1.8mm  | 6.3Vdc        | X7U     | 47μF  | ±20% | GRM31CE70J476ME15# | D1 |
|        |               | X6S     | 47μF  | ±20% | GRM31CC80J476ME18# |    |
|        |               | X5R     | 47μF  | ±20% | GRM31CR60J476ME19# |    |
|        |               | B       | 47μF  | ±20% | GRM31CB30J476ME18# |    |
| 1.9mm  | 4Vdc          | X7U     | 47μF  | ±20% | GRM31CE70G476ME15# |    |
|        |               | X6S     | 47μF  | ±20% | GRM31CC80G476ME19# |    |
|        | 100Vdc        | X7R     | 2.2μF | ±10% | GRM31CR72A225KA73# |    |
|        |               |         |       | ±20% | GRM31CR72A225MA73# |    |
|        | 25Vdc         | X6S     | 22μF  | ±20% | GRM31CC81E226ME11# |    |
|        |               | X7S     | 22μF  | ±20% | GRM31CC71C226ME11# |    |
|        | 16Vdc         | X5R     | 47μF  | ±20% | GRM31CR61C476ME44# |    |
|        |               |         |       | ±20% | GRM31CC81A476ME44# |    |
|        | 10Vdc         | X6S     | 47μF  | ±20% | GRM31CC81A476ME44# |    |
|        |               |         |       | ±20% | GRM31CD80J107ME39# | D1 |
|        | 6.3Vdc        | X6T     | 100μF | ±20% | GRM31CD80J107ME39# |    |
|        |               | X5R     | 100μF | ±20% | GRM31CR60J107ME39# |    |
|        |               |         | 150μF | ±20% | GRM31CR60J157ME11# | D1 |
|        |               |         |       | ±20% | GRM31CE70G107ME39# | D1 |
|        | 4Vdc          | X7U     | 100μF | ±20% | GRM31CE70G107ME39# | D1 |
|        |               | X6S     | 150μF | ±20% | GRM31CC80G157ME11# | D1 |
|        |               | X6T     | 100μF | ±20% | GRM31CD80G107ME39# |    |
|        |               |         |       | ±20% | GRM31CD80G107ME39# |    |
|        |               | X5R     | 100μF | ±20% | GRM31CR60G107ME39# |    |
|        |               |         | 150μF | ±20% | GRM31CR60G157ME11# |    |
|        |               |         | 220μF | ±20% | GRM31CR60G227ME11# |    |
|        |               |         |       | ±20% | GRM31CR60G227ME11# |    |
|        | 2.5Vdc        | X6S     | 150μF | ±20% | GRM31CC80E157ME11# |    |
|        |               | X5R     | 220μF | ±20% | GRM31CR60E227ME11# |    |

3.2×2.5mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |    |
|--------|---------------|---------|---------|------|--------------------|----|
| 1.5mm  | 1000Vdc       | X7R     | 6800pF  | ±10% | GRM32QR73A682KW01# |    |
|        |               |         | 10000pF | ±10% | GRM32QR73A103KW01# |    |
|        | 630Vdc        | X7R     | 22000pF | ±10% | GRM32QR72J223KW01# |    |
|        | 500Vdc        | X7R     | 68000pF | ±10% | GRM32QR72H683KW10# |    |
|        | 250Vdc        | X7R     | 68000pF | ±10% | GRM32QR72E683KW01# |    |
|        |               |         | 0.15μF  | ±10% | GRM32QR72E154KW01# |    |
|        | 200Vdc        | X7R     | 68000pF | ±10% | GRM32QR72D683KW01# |    |
|        |               |         | 0.15μF  | ±10% | GRM32QR72D154KW01# |    |
| 1.8mm  | 100Vdc        | X7R     | 1.0μF   | ±10% | GRM32CR72A105KA35# |    |
|        |               |         |         | ±20% | GRM32CR72A105MA35# |    |
| 2.0mm  | 1000Vdc       | X7R     | 15000pF | ±10% | GRM32DR73A153KW01# |    |
|        |               |         | 22000pF | ±10% | GRM32DR73A223KW01# |    |
|        | 630Vdc        | X7R     | 33000pF | ±10% | GRM32DR72J333KW01# |    |
|        |               |         | 47000pF | ±10% | GRM32DR72J473KW01# |    |
|        | 500Vdc        | X7R     | 0.10μF  | ±10% | GRM32DR72H104KW10# |    |
|        | 250Vdc        | X7R     | 0.10μF  | ±10% | GRM32DR72E104KW01# |    |
|        |               |         | 0.22μF  | ±10% | GRM32DR72E224KW01# |    |
|        | 200Vdc        | X7R     | 0.10μF  | ±10% | GRM32DR72D104KW01# |    |
| 2.2mm  | 100Vdc        | X7S     | 4.7μF   | ±10% | GRM32DC72A475KE01# |    |
|        |               |         |         | ±20% | GRM32DC72A475ME01# |    |
|        | 25Vdc         | X7R     | 10μF    | ±10% | GRM32DR71E106KA12# |    |
|        |               |         |         | ±20% | GRM32DR71E106MA12# |    |
| 2.7mm  | 100Vdc        | X7R     | 2.2μF   | ±10% | GRM32ER72A225KA35# |    |
|        |               |         |         | ±20% | GRM32ER72A225MA35# |    |
|        | 80Vdc         | X7R     | 4.7μF   | ±10% | GRM32ER71K475KE14# | D1 |
|        |               |         |         | ±20% | GRM32ER71K475ME14# | D1 |

Part number # indicates the package specification code.

## GRM Series High Dielectric Constant Type Part Number List

(→ 3.2×2.5mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol. | Part Number        |    |
|--------|---------------|---------|-------|------|--------------------|----|
| 2.7mm  | 63Vdc         | X7R     | 10μF  | ±10% | GRM32ER71J106KA12# | D1 |
|        |               |         |       | ±20% | GRM32ER71J106MA12# | D1 |
|        | 50Vdc         | X7R     | 4.7μF | ±10% | GRM32ER71H475KA88# |    |
|        |               |         |       | ±10% | GRM32ER71H106KA12# |    |
|        |               |         |       | ±20% | GRM32ER71H106MA12# |    |
|        |               | X5R     | 10μF  | ±10% | GRM32ER61H106KA12# |    |
|        |               |         |       | ±20% | GRM32ER61H106MA12# |    |
|        |               | B       | 10μF  | ±10% | GRM32EB31H106KA12# |    |
|        |               |         |       | ±20% | GRM32EB31H106MA12# |    |
|        | 35Vdc         | X7R     | 10μF  | ±10% | GRM32ER7YA106KA12# |    |
|        |               |         |       | ±20% | GRM32ER7YA106MA12# |    |
|        |               | X5R     | 10μF  | ±10% | GRM32ER6YA106KA12# |    |
|        |               |         |       | ±20% | GRM32ER6YA106MA12# |    |
|        |               | B       | 10μF  | ±10% | GRM32EB3YA106KA12# |    |
|        |               |         |       | ±20% | GRM32EB3YA106MA12# |    |
|        | 25Vdc         | X7R     | 22μF  | ±20% | GRM32ER71E226ME15# |    |
|        |               | X5R     | 22μF  | ±20% | GRM32ER61E226ME15# |    |
|        |               | B       | 22μF  | ±20% | GRM32EB31E226ME15# |    |
|        | 16Vdc         | X7R     | 22μF  | ±20% | GRM32ER71C226MEA8# |    |
|        |               | X6S     | 47μF  | ±20% | GRM32EC81C476ME15# | D1 |
|        |               | X5R     | 47μF  | ±20% | GRM32ER61C476ME15# |    |
|        | 10Vdc         | X7R     | 47μF  | ±20% | GRM32ER71A476ME15# |    |
|        |               |         |       | ±20% | GRM32ER61A476ME20# |    |
|        |               |         | 100μF | ±20% | GRM32ER61A107ME20# | D1 |
|        | 6.3Vdc        | B       | 47μF  | ±20% | GRM32EB31A476ME20# |    |
|        |               | X7R     | 47μF  | ±20% | GRM32ER70J476ME20# |    |
|        |               | X7U     | 100μF | ±20% | GRM32EE70J107ME15# | D1 |
|        |               | X5R     | 100μF | ±20% | GRM32ER60J107ME20# |    |
|        | 4Vdc          | X7U     | 100μF | ±20% | GRM32EB30J107ME16# |    |
|        |               |         |       | ±20% | GRM32EE70G107ME19# |    |

5.7×5.0mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 2.0mm  | 1000Vdc       | X7R     | 68000pF | ±10% | GRM55DR73A683KW01# |  |
|        |               |         | 0.10μF  | ±10% | GRM55DR73A104KW01# |  |
|        | 630Vdc        | X7R     | 0.15μF  | ±10% | GRM55DR72J154KW01# |  |
|        |               |         | 0.22μF  | ±10% | GRM55DR72J224KW01# |  |
|        | 500Vdc        | X7R     | 0.33μF  | ±10% | GRM55DR72H334KW10# |  |
|        |               |         | 0.47μF  | ±10% | GRM55DR72H474KW10# |  |
|        | 250Vdc        | X7R     | 0.33μF  | ±10% | GRM55DR72E334KW01# |  |
|        |               |         | 0.47μF  | ±10% | GRM55DR72E474KW01# |  |
|        |               |         | 0.68μF  | ±10% | GRM55DR72E684KW01# |  |
|        |               |         | 1.0μF   | ±10% | GRM55DR72E105KW01# |  |
|        | 200Vdc        | X7R     | 0.33μF  | ±10% | GRM55DR72D334KW01# |  |
|        |               |         | 0.47μF  | ±10% | GRM55DR72D474KW01# |  |
|        |               |         | 0.68μF  | ±10% | GRM55DR72D684KW01# |  |
|        |               |         | 1.0μF   | ±10% | GRM55DR72D105KW01# |  |

4.5×3.2mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 1.5mm  | 630Vdc        | X7R     | 68000pF | ±10% | GRM43QR72J683KW01# |  |
|        | 500Vdc        | X7R     | 0.15μF  | ±10% | GRM43QR72H154KW10# |  |
|        | 250Vdc        | X7R     | 0.15μF  | ±10% | GRM43QR72E154KW01# |  |
|        | 200Vdc        | X7R     | 0.15μF  | ±10% | GRM43QR72D154KW01# |  |
| 2.0mm  | 1000Vdc       | X7R     | 33000pF | ±10% | GRM43DR73A333KW01# |  |
|        |               |         | 47000pF | ±10% | GRM43DR73A473KW01# |  |
|        | 630Vdc        | X7R     | 0.10μF  | ±10% | GRM43DR72J104KW01# |  |
|        | 500Vdc        | X7R     | 0.22μF  | ±10% | GRM43DR72H224KW10# |  |
|        | 250Vdc        | X7R     | 0.22μF  | ±10% | GRM43DR72E224KW01# |  |
|        |               |         | 0.33μF  | ±10% | GRM43DR72E334KW01# |  |
|        |               |         | 0.47μF  | ±10% | GRM43DR72E474KW01# |  |
|        | 200Vdc        | X7R     | 0.22μF  | ±10% | GRM43DR72D224KW01# |  |
|        |               |         | 0.33μF  | ±10% | GRM43DR72D334KW01# |  |
|        |               |         | 0.47μF  | ±10% | GRM43DR72D474KW01# |  |

## High Q Monolithic Ceramic Capacitor for High Frequency

# GJM Series

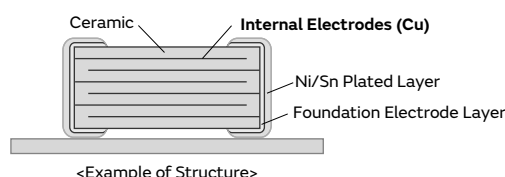


This product improves the high frequency characteristics and contributes to a reduction of power consumption by the High Q and low ESR.

## Features

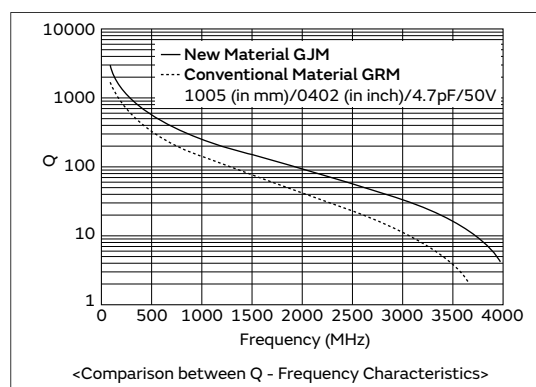
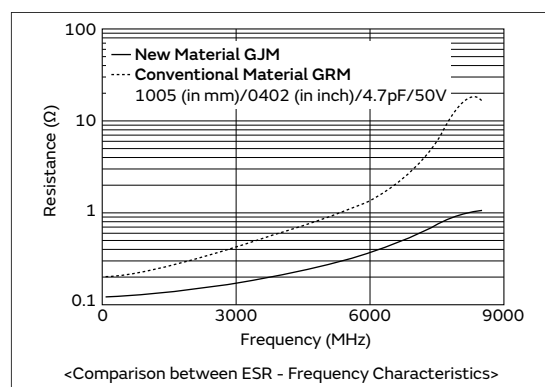
### ① Mainly ideal for mobile communication devices and temperature compensation of related modules.

This product is ideal for temperature compensation of high frequency circuits, such as resonant circuits, tuning circuits, and impedance matching circuits where the operating characteristics of the device are greatly affected by the capacitance fluctuation.



### ② High Q and low ESR in VHF, UHF and microwave frequency bands.

High Q and low ESR were achieved at a high frequency by adopting ceramic material as the dielectric material which enables an extremely low loss at high frequency, and base metal electrodes as the internal electrodes.



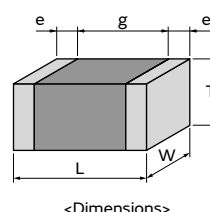
### ③ Can be used for tight tolerance.

In addition to standard tolerance, the allowable range of this product is also suitable for the following tight tolerance.

| Capacitance Range | Standard Capacitance Tolerance<br>(Capacitance Tolerance Symbol) | Narrow Capacitance Tolerance<br>(Capacitance Tolerance Symbol) |
|-------------------|------------------------------------------------------------------|----------------------------------------------------------------|
| to 0.9pF          | ±0.1pF (B)                                                       | ±0.05pF (W)                                                    |
| 1.0 to 5.0pF      | ±0.25pF (C)                                                      | ±0.05pF (W), ±0.1pF (B)                                        |
| 5.1 to 9.9pF      | ±0.5pF (D)                                                       | ±0.05pF (W), ±0.1pF (B), ±0.25pF (C)                           |
| 10pF to           | ±5% (J)                                                          | ±2% (G)                                                        |

## Specifications

|                   |                                                                                             |
|-------------------|---------------------------------------------------------------------------------------------|
| Size (mm)         | 0.4×0.2mm to 1.0×0.5mm                                                                      |
| Rated Voltage     | 6.3Vdc to 50Vdc                                                                             |
| Capacitance       | 0.10pF to 47pF                                                                              |
| Main Applications | Small communication devices, such as mobile phones and high frequency communication modules |



This catalog contains only a portion of the product lineup.  
Please refer to the capacitor search tool on the Murata Web site for details.

## GJM Series Temperature Compensating Type High Q Part Number List

### 0.4×0.2mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |
|--------|---------------|---------|--------|---------|--------------------|
| 0.22mm | 25Vdc         | COG     | 0.20pF | ±0.05pF | GJM0225C1ER20WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1ER20BB01# |
|        |               |         | 0.30pF | ±0.05pF | GJM0225C1ER30WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1ER30BB01# |
|        |               |         | 0.40pF | ±0.05pF | GJM0225C1ER40WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1ER40BB01# |
|        |               |         | 0.50pF | ±0.05pF | GJM0225C1ER50WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1ER50BB01# |
|        |               |         | 0.60pF | ±0.05pF | GJM0225C1ER60WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1ER60BB01# |
|        |               |         | 0.70pF | ±0.05pF | GJM0225C1ER70WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1ER70BB01# |
|        |               |         | 0.80pF | ±0.05pF | GJM0225C1ER80WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1ER80BB01# |
|        |               |         | 0.90pF | ±0.05pF | GJM0225C1ER90WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1ER90BB01# |
|        |               |         | 1.0pF  | ±0.05pF | GJM0225C1E1R0WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1E1R0BB01# |
|        |               |         |        | ±0.25pF | GJM0225C1E1R0CB01# |
|        |               |         | 1.1pF  | ±0.05pF | GJM0225C1E1R1WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1E1R1BB01# |
|        |               |         |        | ±0.25pF | GJM0225C1E1R1CB01# |
|        |               |         | 1.2pF  | ±0.05pF | GJM0225C1E1R2WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1E1R2BB01# |
|        |               |         |        | ±0.25pF | GJM0225C1E1R2CB01# |
|        |               |         | 1.3pF  | ±0.05pF | GJM0225C1E1R3WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1E1R3BB01# |
|        |               |         |        | ±0.25pF | GJM0225C1E1R3CB01# |
|        |               |         | 1.4pF  | ±0.05pF | GJM0225C1E1R4WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1E1R4BB01# |
|        |               |         |        | ±0.25pF | GJM0225C1E1R4CB01# |
|        |               |         | 1.5pF  | ±0.05pF | GJM0225C1E1R5WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1E1R5BB01# |
|        |               |         |        | ±0.25pF | GJM0225C1E1R5CB01# |
|        |               |         | 1.6pF  | ±0.05pF | GJM0225C1E1R6WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1E1R6BB01# |
|        |               |         |        | ±0.25pF | GJM0225C1E1R6CB01# |
|        |               |         | 1.7pF  | ±0.05pF | GJM0225C1E1R7WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1E1R7BB01# |
|        |               |         |        | ±0.25pF | GJM0225C1E1R7CB01# |
|        |               |         | 1.8pF  | ±0.05pF | GJM0225C1E1R8WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1E1R8BB01# |
|        |               |         |        | ±0.25pF | GJM0225C1E1R8CB01# |
|        |               |         | 1.9pF  | ±0.05pF | GJM0225C1E1R9WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1E1R9BB01# |
|        |               |         |        | ±0.25pF | GJM0225C1E1R9CB01# |
|        |               |         | 2.0pF  | ±0.05pF | GJM0225C1E2R0WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1E2R0BB01# |
|        |               |         |        | ±0.25pF | GJM0225C1E2R0CB01# |
|        |               |         | 2.1pF  | ±0.05pF | GJM0225C1E2R1WB01# |
|        |               |         |        | ±0.1pF  | GJM0225C1E2R1BB01# |
|        |               |         |        | ±0.25pF | GJM0225C1E2R1CB01# |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |
|--------|---------------|---------|-------|---------|--------------------|
| 0.22mm | 25Vdc         | COG     | 2.2pF | ±0.05pF | GJM0225C1E2R2WB01# |
|        |               |         |       | ±0.1pF  | GJM0225C1E2R2BB01# |
|        |               |         |       | ±0.25pF | GJM0225C1E2R2CB01# |
|        |               |         | 2.3pF | ±0.05pF | GJM0225C1E2R3WB01# |
|        |               |         |       | ±0.1pF  | GJM0225C1E2R3BB01# |
|        |               |         |       | ±0.25pF | GJM0225C1E2R3CB01# |
|        |               |         | 2.4pF | ±0.05pF | GJM0225C1E2R4WB01# |
|        |               |         |       | ±0.1pF  | GJM0225C1E2R4BB01# |
|        |               |         |       | ±0.25pF | GJM0225C1E2R4CB01# |
|        |               |         | 2.5pF | ±0.05pF | GJM0225C1E2R5WB01# |
|        |               |         |       | ±0.1pF  | GJM0225C1E2R5BB01# |
|        |               |         |       | ±0.25pF | GJM0225C1E2R5CB01# |
|        |               |         | 2.6pF | ±0.05pF | GJM0225C1E2R6WB01# |
|        |               |         |       | ±0.1pF  | GJM0225C1E2R6BB01# |
|        |               |         |       | ±0.25pF | GJM0225C1E2R6CB01# |
|        |               |         | 2.7pF | ±0.05pF | GJM0225C1E2R7WB01# |
|        |               |         |       | ±0.1pF  | GJM0225C1E2R7BB01# |
|        |               |         |       | ±0.25pF | GJM0225C1E2R7CB01# |
|        |               |         | 2.8pF | ±0.05pF | GJM0225C1E2R8WB01# |
|        |               |         |       | ±0.1pF  | GJM0225C1E2R8BB01# |
|        |               |         |       | ±0.25pF | GJM0225C1E2R8CB01# |
|        |               |         | 2.9pF | ±0.05pF | GJM0225C1E2R9WB01# |
|        |               |         |       | ±0.1pF  | GJM0225C1E2R9BB01# |
|        |               |         |       | ±0.25pF | GJM0225C1E2R9CB01# |
|        |               |         | 3.0pF | ±0.05pF | GJM0225C1E3R0WB01# |
|        |               |         |       | ±0.1pF  | GJM0225C1E3R0BB01# |
|        |               |         |       | ±0.25pF | GJM0225C1E3R0CB01# |
|        |               |         | 3.1pF | ±0.05pF | GJM0225C1E3R1WB01# |
|        |               |         |       | ±0.1pF  | GJM0225C1E3R1BB01# |
|        |               |         |       | ±0.25pF | GJM0225C1E3R1CB01# |
|        |               |         | 3.2pF | ±0.05pF | GJM0225C1E3R2WB01# |
|        |               |         |       | ±0.1pF  | GJM0225C1E3R2BB01# |
|        |               |         |       | ±0.25pF | GJM0225C1E3R2CB01# |
|        |               |         | 3.3pF | ±0.05pF | GJM0225C1E3R3WB01# |
|        |               |         |       | ±0.1pF  | GJM0225C1E3R3BB01# |
|        |               |         |       | ±0.25pF | GJM0225C1E3R3CB01# |
|        |               |         | 3.4pF | ±0.05pF | GJM0225C1E3R4WB01# |
|        |               |         |       | ±0.1pF  | GJM0225C1E3R4BB01# |
|        |               |         |       | ±0.25pF | GJM0225C1E3R4CB01# |
|        |               |         | 3.5pF | ±0.05pF | GJM0225C1E3R5WB01# |
|        |               |         |       | ±0.1pF  | GJM0225C1E3R5BB01# |
|        |               |         |       | ±0.25pF | GJM0225C1E3R5CB01# |
|        |               |         | 3.6pF | ±0.05pF | GJM0225C1E3R6WB01# |
|        |               |         |       | ±0.1pF  | GJM0225C1E3R6BB01# |
|        |               |         |       | ±0.25pF | GJM0225C1E3R6CB01# |
|        |               |         | 3.7pF | ±0.05pF | GJM0225C1E3R7WB01# |
|        |               |         |       | ±0.1pF  | GJM0225C1E3R7BB01# |
|        |               |         |       | ±0.25pF | GJM0225C1E3R7CB01# |
|        |               |         | 3.8pF | ±0.05pF | GJM0225C1E3R8WB01# |
|        |               |         |       | ±0.1pF  | GJM0225C1E3R8BB01# |
|        |               |         |       | ±0.25pF | GJM0225C1E3R8CB01# |
|        |               |         | 3.9pF | ±0.05pF | GJM0225C1E3R9WB01# |
|        |               |         |       | ±0.1pF  | GJM0225C1E3R9BB01# |
|        |               |         |       | ±0.25pF | GJM0225C1E3R9CB01# |

Part number # indicates the package specification code.

## GJM Series Temperature Compensating Type **High Q** Part Number List

(→ 0.4×0.2mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.22mm | 25Vdc         | COG     | 4.0pF | ±0.05pF | GJM0225C1E4R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E4R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E4R0CB01# |  |
|        |               |         | 4.1pF | ±0.05pF | GJM0225C1E4R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E4R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E4R1CB01# |  |
|        |               |         | 4.2pF | ±0.05pF | GJM0225C1E4R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E4R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E4R2CB01# |  |
|        |               |         | 4.3pF | ±0.05pF | GJM0225C1E4R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E4R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E4R3CB01# |  |
|        |               |         | 4.4pF | ±0.05pF | GJM0225C1E4R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E4R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E4R4CB01# |  |
|        |               |         | 4.5pF | ±0.05pF | GJM0225C1E4R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E4R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E4R5CB01# |  |
|        |               |         | 4.6pF | ±0.05pF | GJM0225C1E4R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E4R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E4R6CB01# |  |
|        |               |         | 4.7pF | ±0.05pF | GJM0225C1E4R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E4R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E4R7CB01# |  |
|        |               |         | 4.8pF | ±0.05pF | GJM0225C1E4R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E4R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E4R8CB01# |  |
|        |               |         | 4.9pF | ±0.05pF | GJM0225C1E4R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E4R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E4R9CB01# |  |
|        |               |         | 5.0pF | ±0.05pF | GJM0225C1E5R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E5R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E5R0CB01# |  |
|        |               |         | 5.1pF | ±0.05pF | GJM0225C1E5R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E5R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E5R1CB01# |  |
|        |               |         | 5.2pF | ±0.05pF | GJM0225C1E5R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E5R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E5R2CB01# |  |
|        |               |         | 5.3pF | ±0.05pF | GJM0225C1E5R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E5R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E5R3CB01# |  |
|        |               |         | 5.4pF | ±0.05pF | GJM0225C1E5R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E5R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E5R4CB01# |  |
|        |               |         | 5.5pF | ±0.05pF | GJM0225C1E5R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E5R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E5R5CB01# |  |
|        |               |         | 5.6pF | ±0.05pF | GJM0225C1E5R5DB01# |  |
|        |               |         |       | ±0.05pF | GJM0225C1E5R6WB01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.22mm | 25Vdc         | COG     | 5.6pF | ±0.1pF  | GJM0225C1E5R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E5R6CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0225C1E5R6DB01# |  |
|        |               |         | 5.7pF | ±0.05pF | GJM0225C1E5R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E5R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E5R7CB01# |  |
|        |               |         | 5.8pF | ±0.05pF | GJM0225C1E5R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E5R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E5R8CB01# |  |
|        |               |         | 5.9pF | ±0.05pF | GJM0225C1E5R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E5R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E5R9CB01# |  |
|        |               |         | 6.0pF | ±0.05pF | GJM0225C1E6R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E6R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E6R0CB01# |  |
|        |               |         | 6.1pF | ±0.05pF | GJM0225C1E6R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E6R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E6R1CB01# |  |
|        |               |         | 6.2pF | ±0.05pF | GJM0225C1E6R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E6R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E6R2CB01# |  |
|        |               |         | 6.3pF | ±0.05pF | GJM0225C1E6R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E6R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E6R3CB01# |  |
|        |               |         | 6.4pF | ±0.05pF | GJM0225C1E6R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E6R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E6R4CB01# |  |
|        |               |         | 6.5pF | ±0.05pF | GJM0225C1E6R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E6R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E6R5CB01# |  |
|        |               |         | 6.6pF | ±0.05pF | GJM0225C1E6R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E6R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E6R6CB01# |  |
|        |               |         | 6.7pF | ±0.05pF | GJM0225C1E6R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E6R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E6R7CB01# |  |
|        |               |         | 6.8pF | ±0.05pF | GJM0225C1E6R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E6R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E6R8CB01# |  |
|        |               |         | 6.9pF | ±0.05pF | GJM0225C1E6R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E6R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E6R9CB01# |  |

Part number # indicates the package specification code.

## GJM Series Temperature Compensating Type High Q Part Number List

(→ 0.4×0.2mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.22mm | 25Vdc         | COG     | 6.9pF | ±0.5pF  | GJM0225C1E6R9DB01# |  |
|        |               |         |       | ±0.05pF | GJM0225C1E7R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E7R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E7R0CB01# |  |
|        |               |         | 7.0pF | ±0.5pF  | GJM0225C1E7R0DB01# |  |
|        |               |         |       | ±0.05pF | GJM0225C1E7R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E7R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E7R1CB01# |  |
|        |               |         | 7.1pF | ±0.5pF  | GJM0225C1E7R1DB01# |  |
|        |               |         |       | ±0.05pF | GJM0225C1E7R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E7R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E7R2CB01# |  |
|        |               |         | 7.2pF | ±0.5pF  | GJM0225C1E7R2DB01# |  |
|        |               |         |       | ±0.05pF | GJM0225C1E7R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E7R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E7R3CB01# |  |
|        |               |         | 7.3pF | ±0.5pF  | GJM0225C1E7R3DB01# |  |
|        |               |         |       | ±0.05pF | GJM0225C1E7R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E7R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E7R4CB01# |  |
|        |               |         | 7.4pF | ±0.5pF  | GJM0225C1E7R4DB01# |  |
|        |               |         |       | ±0.05pF | GJM0225C1E7R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E7R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E7R5CB01# |  |
|        |               |         | 7.5pF | ±0.5pF  | GJM0225C1E7R5DB01# |  |
|        |               |         |       | ±0.05pF | GJM0225C1E7R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E7R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E7R6CB01# |  |
|        |               |         | 7.6pF | ±0.5pF  | GJM0225C1E7R6DB01# |  |
|        |               |         |       | ±0.05pF | GJM0225C1E7R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E7R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E7R7CB01# |  |
|        |               |         | 7.7pF | ±0.5pF  | GJM0225C1E7R7DB01# |  |
|        |               |         |       | ±0.05pF | GJM0225C1E7R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E7R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E7R8CB01# |  |
|        |               |         | 7.8pF | ±0.5pF  | GJM0225C1E7R8DB01# |  |
|        |               |         |       | ±0.05pF | GJM0225C1E7R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E7R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E7R9CB01# |  |
|        |               |         | 7.9pF | ±0.5pF  | GJM0225C1E7R9DB01# |  |
|        |               |         |       | ±0.05pF | GJM0225C1E8R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E8R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E8R0CB01# |  |
|        |               |         | 8.0pF | ±0.5pF  | GJM0225C1E8R0DB01# |  |
|        |               |         |       | ±0.05pF | GJM0225C1E8R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E8R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E8R1CB01# |  |
|        |               |         | 8.1pF | ±0.5pF  | GJM0225C1E8R1DB01# |  |
|        |               |         |       | ±0.05pF | GJM0225C1E8R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E8R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E8R2CB01# |  |
|        |               |         | 8.2pF | ±0.5pF  | GJM0225C1E8R2DB01# |  |
|        |               |         |       | ±0.05pF | GJM0225C1E8R3WB01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.22mm | 25Vdc         | COG     | 8.3pF | ±0.1pF  | GJM0225C1E8R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E8R3CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0225C1E8R3DB01# |  |
|        |               |         | 8.4pF | ±0.05pF | GJM0225C1E8R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E8R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E8R4CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0225C1E8R4DB01# |  |
|        |               |         | 8.5pF | ±0.05pF | GJM0225C1E8R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E8R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E8R5CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0225C1E8R5DB01# |  |
|        |               |         | 8.6pF | ±0.05pF | GJM0225C1E8R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E8R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E8R6CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0225C1E8R6DB01# |  |
|        |               |         | 8.7pF | ±0.05pF | GJM0225C1E8R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E8R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E8R7CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0225C1E8R7DB01# |  |
|        |               |         | 8.8pF | ±0.05pF | GJM0225C1E8R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E8R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E8R8CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0225C1E8R8DB01# |  |
|        |               |         | 8.9pF | ±0.05pF | GJM0225C1E8R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E8R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E8R9CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0225C1E8R9DB01# |  |
|        |               |         | 9.0pF | ±0.05pF | GJM0225C1E9R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E9R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E9R0CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0225C1E9R0DB01# |  |
|        |               |         | 9.1pF | ±0.05pF | GJM0225C1E9R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E9R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E9R1CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0225C1E9R1DB01# |  |
|        |               |         | 9.2pF | ±0.05pF | GJM0225C1E9R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E9R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E9R2CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0225C1E9R2DB01# |  |
|        |               |         | 9.3pF | ±0.05pF | GJM0225C1E9R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E9R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E9R3CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0225C1E9R3DB01# |  |
|        |               |         | 9.4pF | ±0.05pF | GJM0225C1E9R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E9R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E9R4CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0225C1E9R4DB01# |  |
|        |               |         | 9.5pF | ±0.05pF | GJM0225C1E9R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E9R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E9R5CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0225C1E9R5DB01# |  |
|        |               |         | 9.6pF | ±0.05pF | GJM0225C1E9R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0225C1E9R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0225C1E9R6CB01# |  |

Part number # indicates the package specification code.

# GJM Series Temperature Compensating Type High Q Part Number List

(→ 0.4×0.2mm)

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|--------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 0.22mm | 25Vdc         | COG     | 9.6pF  | ±0.5pF  | GJM0225C1E9R6DB01# |  | 0.22mm | 25Vdc         | CK      | 1.2pF | ±0.1pF  | GJM0224C1E1R2BB01# |  |
|        |               |         | 9.7pF  | ±0.05pF | GJM0225C1E9R7WB01# |  |        |               |         | 1.3pF | ±0.25pF | GJM0224C1E1R2CB01# |  |
|        |               |         |        | ±0.1pF  | GJM0225C1E9R7BB01# |  |        |               |         |       | ±0.05pF | GJM0224C1E1R3WB01# |  |
|        |               |         |        | ±0.25pF | GJM0225C1E9R7CB01# |  |        |               |         |       | ±0.1pF  | GJM0224C1E1R3BB01# |  |
|        |               |         |        | ±0.5pF  | GJM0225C1E9R7DB01# |  |        |               |         |       | ±0.25pF | GJM0224C1E1R3CB01# |  |
|        |               |         | 9.8pF  | ±0.05pF | GJM0225C1E9R8WB01# |  |        |               |         | 1.4pF | ±0.05pF | GJM0224C1E1R4WB01# |  |
|        |               |         |        | ±0.1pF  | GJM0225C1E9R8BB01# |  |        |               |         |       | ±0.1pF  | GJM0224C1E1R4BB01# |  |
|        |               |         |        | ±0.25pF | GJM0225C1E9R8CB01# |  |        |               |         |       | ±0.25pF | GJM0224C1E1R4CB01# |  |
|        |               |         |        | ±0.5pF  | GJM0225C1E9R8DB01# |  |        |               |         | 1.5pF | ±0.05pF | GJM0224C1E1R5WB01# |  |
|        |               |         | 9.9pF  | ±0.05pF | GJM0225C1E9R9WB01# |  |        |               |         |       | ±0.1pF  | GJM0224C1E1R5BB01# |  |
|        |               |         |        | ±0.1pF  | GJM0225C1E9R9BB01# |  |        |               |         |       | ±0.25pF | GJM0224C1E1R5CB01# |  |
|        |               |         |        | ±0.25pF | GJM0225C1E9R9CB01# |  |        |               |         | 1.6pF | ±0.05pF | GJM0224C1E1R6WB01# |  |
|        |               |         |        | ±0.5pF  | GJM0225C1E9R9DB01# |  |        |               |         |       | ±0.1pF  | GJM0224C1E1R6BB01# |  |
|        |               |         | 10pF   | ±2%     | GJM0225C1E100GB01# |  |        |               |         |       | ±0.25pF | GJM0224C1E1R6CB01# |  |
|        |               |         |        | ±5%     | GJM0225C1E100JB01# |  |        |               |         | 1.7pF | ±0.05pF | GJM0224C1E1R7WB01# |  |
|        |               |         | 11pF   | ±2%     | GJM0225C1E110GB01# |  |        |               |         |       | ±0.1pF  | GJM0224C1E1R7BB01# |  |
|        |               |         |        | ±5%     | GJM0225C1E110JB01# |  |        |               |         |       | ±0.25pF | GJM0224C1E1R7CB01# |  |
|        |               |         | 12pF   | ±2%     | GJM0225C1E120GB01# |  |        |               |         | 1.8pF | ±0.05pF | GJM0224C1E1R8WB01# |  |
|        |               |         |        | ±5%     | GJM0225C1E120JB01# |  |        |               |         |       | ±0.1pF  | GJM0224C1E1R8BB01# |  |
|        |               |         | 13pF   | ±2%     | GJM0225C1E130GB01# |  |        |               |         |       | ±0.25pF | GJM0224C1E1R8CB01# |  |
|        |               |         |        | ±5%     | GJM0225C1E130JB01# |  |        |               |         | 1.9pF | ±0.05pF | GJM0224C1E1R9WB01# |  |
|        |               |         | 15pF   | ±2%     | GJM0225C1E150GB01# |  |        |               |         |       | ±0.1pF  | GJM0224C1E1R9BB01# |  |
|        |               |         |        | ±5%     | GJM0225C1E150JB01# |  |        |               |         |       | ±0.25pF | GJM0224C1E1R9CB01# |  |
|        |               |         | 16pF   | ±2%     | GJM0225C1E160GB01# |  |        |               |         | 2.0pF | ±0.05pF | GJM0224C1E2R0WB01# |  |
|        |               |         |        | ±5%     | GJM0225C1E160JB01# |  |        |               |         |       | ±0.1pF  | GJM0224C1E2R0BB01# |  |
|        |               |         | 18pF   | ±2%     | GJM0225C1E180GB01# |  |        |               |         |       | ±0.25pF | GJM0224C1E2R0CB01# |  |
|        |               |         |        | ±5%     | GJM0225C1E180JB01# |  |        |               | CJ      | 2.1pF | ±0.05pF | GJM0223C1E2R1WB01# |  |
|        |               |         | 20pF   | ±2%     | GJM0225C1E200GB01# |  |        |               |         |       | ±0.1pF  | GJM0223C1E2R1BB01# |  |
|        |               |         |        | ±5%     | GJM0225C1E200JB01# |  |        |               |         |       | ±0.25pF | GJM0223C1E2R1CB01# |  |
|        |               |         | 22pF   | ±2%     | GJM0225C1E220GB01# |  |        |               |         | 2.2pF | ±0.05pF | GJM0223C1E2R2WB01# |  |
|        |               |         |        | ±5%     | GJM0225C1E220JB01# |  |        |               |         |       | ±0.1pF  | GJM0223C1E2R2BB01# |  |
|        |               |         | 0.20pF | ±0.05pF | GJM0224C1ER20WB01# |  |        |               |         |       | ±0.25pF | GJM0223C1E2R2CB01# |  |
|        |               |         |        | ±0.1pF  | GJM0224C1ER20BB01# |  |        |               |         | 2.3pF | ±0.05pF | GJM0223C1E2R3WB01# |  |
|        |               |         | 0.30pF | ±0.05pF | GJM0224C1ER30WB01# |  |        |               |         |       | ±0.1pF  | GJM0223C1E2R3BB01# |  |
|        |               |         |        | ±0.1pF  | GJM0224C1ER30BB01# |  |        |               |         |       | ±0.25pF | GJM0223C1E2R3CB01# |  |
|        |               |         | 0.40pF | ±0.05pF | GJM0224C1ER40WB01# |  |        |               |         | 2.4pF | ±0.05pF | GJM0223C1E2R4WB01# |  |
|        |               |         |        | ±0.1pF  | GJM0224C1ER40BB01# |  |        |               |         |       | ±0.1pF  | GJM0223C1E2R4BB01# |  |
|        |               |         | 0.50pF | ±0.05pF | GJM0224C1ER50WB01# |  |        |               |         |       | ±0.25pF | GJM0223C1E2R4CB01# |  |
|        |               |         |        | ±0.1pF  | GJM0224C1ER50BB01# |  |        |               |         | 2.5pF | ±0.05pF | GJM0223C1E2R5WB01# |  |
|        |               |         | 0.60pF | ±0.05pF | GJM0224C1ER60WB01# |  |        |               |         |       | ±0.1pF  | GJM0223C1E2R5BB01# |  |
|        |               |         |        | ±0.1pF  | GJM0224C1ER60BB01# |  |        |               |         |       | ±0.25pF | GJM0223C1E2R5CB01# |  |
|        |               |         | 0.70pF | ±0.05pF | GJM0224C1ER70WB01# |  |        |               |         | 2.6pF | ±0.05pF | GJM0223C1E2R6WB01# |  |
|        |               |         |        | ±0.1pF  | GJM0224C1ER70BB01# |  |        |               |         |       | ±0.1pF  | GJM0223C1E2R6BB01# |  |
|        |               |         | 0.80pF | ±0.05pF | GJM0224C1ER80WB01# |  |        |               |         |       | ±0.25pF | GJM0223C1E2R6CB01# |  |
|        |               |         |        | ±0.1pF  | GJM0224C1ER80BB01# |  |        |               |         | 2.7pF | ±0.05pF | GJM0223C1E2R7WB01# |  |
|        |               |         | 0.90pF | ±0.05pF | GJM0224C1ER90WB01# |  |        |               |         |       | ±0.1pF  | GJM0223C1E2R7BB01# |  |
|        |               |         |        | ±0.1pF  | GJM0224C1ER90BB01# |  |        |               |         |       | ±0.25pF | GJM0223C1E2R7CB01# |  |
|        |               |         | 1.0pF  | ±0.05pF | GJM0224C1E1R0WB01# |  |        |               |         | 2.8pF | ±0.05pF | GJM0223C1E2R8WB01# |  |
|        |               |         |        | ±0.1pF  | GJM0224C1E1R0BB01# |  |        |               |         |       | ±0.1pF  | GJM0223C1E2R8BB01# |  |
|        |               |         |        | ±0.25pF | GJM0224C1E1R0CB01# |  |        |               |         |       | ±0.25pF | GJM0223C1E2R8CB01# |  |
|        |               |         | 1.1pF  | ±0.05pF | GJM0224C1E1R1WB01# |  |        |               |         | 2.9pF | ±0.05pF | GJM0223C1E2R9WB01# |  |
|        |               |         |        | ±0.1pF  | GJM0224C1E1R1BB01# |  |        |               |         |       | ±0.1pF  | GJM0223C1E2R9BB01# |  |
|        |               |         |        | ±0.25pF | GJM0224C1E1R1CB01# |  |        |               |         |       | ±0.25pF | GJM0223C1E2R9CB01# |  |
|        |               |         | 1.2pF  | ±0.05pF | GJM0224C1E1R2WB01# |  |        |               |         | 3.0pF | ±0.05pF | GJM0223C1E3R0WB01# |  |

Part number # indicates the package specification code.

## GJM Series Temperature Compensating Type High Q Part Number List

(→ 0.4×0.2mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 0.22mm | 25Vdc         | CJ      | 3.0pF | ±0.1pF  | GJM0223C1E3R0BB01# |  | 0.22mm | 25Vdc         | CH      | 4.8pF | ±0.1pF  | GJM0222C1E4R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0223C1E3R0CB01# |  |        |               |         |       | ±0.25pF | GJM0222C1E4R8CB01# |  |
|        |               |         | 3.1pF | ±0.05pF | GJM0223C1E3R1WB01# |  |        |               |         | 4.9pF | ±0.05pF | GJM0222C1E4R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0223C1E3R1BB01# |  |        |               |         |       | ±0.1pF  | GJM0222C1E4R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0223C1E3R1CB01# |  |        |               |         |       | ±0.25pF | GJM0222C1E4R9CB01# |  |
|        |               |         | 3.2pF | ±0.05pF | GJM0223C1E3R2WB01# |  |        |               |         | 5.0pF | ±0.05pF | GJM0222C1E5R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0223C1E3R2BB01# |  |        |               |         |       | ±0.1pF  | GJM0222C1E5R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0223C1E3R2CB01# |  |        |               |         |       | ±0.25pF | GJM0222C1E5R0CB01# |  |
|        |               |         | 3.3pF | ±0.05pF | GJM0223C1E3R3WB01# |  |        |               |         | 5.1pF | ±0.05pF | GJM0222C1E5R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0223C1E3R3BB01# |  |        |               |         |       | ±0.1pF  | GJM0222C1E5R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0223C1E3R3CB01# |  |        |               |         |       | ±0.25pF | GJM0222C1E5R1CB01# |  |
|        |               |         | 3.4pF | ±0.05pF | GJM0223C1E3R4WB01# |  |        |               |         |       | ±0.5pF  | GJM0222C1E5R1DB01# |  |
|        |               |         |       | ±0.1pF  | GJM0223C1E3R4BB01# |  |        |               |         | 5.2pF | ±0.05pF | GJM0222C1E5R2WB01# |  |
|        |               |         |       | ±0.25pF | GJM0223C1E3R4CB01# |  |        |               |         |       | ±0.1pF  | GJM0222C1E5R2BB01# |  |
|        |               |         | 3.5pF | ±0.05pF | GJM0223C1E3R5WB01# |  |        |               |         |       | ±0.25pF | GJM0222C1E5R2CB01# |  |
|        |               |         |       | ±0.1pF  | GJM0223C1E3R5BB01# |  |        |               |         |       | ±0.5pF  | GJM0222C1E5R2DB01# |  |
|        |               |         |       | ±0.25pF | GJM0223C1E3R5CB01# |  |        |               |         | 5.3pF | ±0.05pF | GJM0222C1E5R3WB01# |  |
|        |               |         | 3.6pF | ±0.05pF | GJM0223C1E3R6WB01# |  |        |               |         |       | ±0.1pF  | GJM0222C1E5R3BB01# |  |
|        |               |         |       | ±0.1pF  | GJM0223C1E3R6BB01# |  |        |               |         |       | ±0.25pF | GJM0222C1E5R3CB01# |  |
|        |               |         |       | ±0.25pF | GJM0223C1E3R6CB01# |  |        |               |         |       | ±0.5pF  | GJM0222C1E5R3DB01# |  |
|        |               |         | 3.7pF | ±0.05pF | GJM0223C1E3R7WB01# |  |        |               |         | 5.4pF | ±0.05pF | GJM0222C1E5R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0223C1E3R7BB01# |  |        |               |         |       | ±0.1pF  | GJM0222C1E5R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0223C1E3R7CB01# |  |        |               |         |       | ±0.25pF | GJM0222C1E5R4CB01# |  |
|        |               |         | 3.8pF | ±0.05pF | GJM0223C1E3R8WB01# |  |        |               |         |       | ±0.5pF  | GJM0222C1E5R4DB01# |  |
|        |               |         |       | ±0.1pF  | GJM0223C1E3R8BB01# |  |        |               |         | 5.5pF | ±0.05pF | GJM0222C1E5R5WB01# |  |
|        |               |         |       | ±0.25pF | GJM0223C1E3R8CB01# |  |        |               |         |       | ±0.1pF  | GJM0222C1E5R5BB01# |  |
|        |               |         | 3.9pF | ±0.05pF | GJM0223C1E3R9WB01# |  |        |               |         |       | ±0.25pF | GJM0222C1E5R5CB01# |  |
|        |               |         |       | ±0.1pF  | GJM0223C1E3R9BB01# |  |        |               |         |       | ±0.5pF  | GJM0222C1E5R5DB01# |  |
|        |               |         |       | ±0.25pF | GJM0223C1E3R9CB01# |  |        |               |         | 5.6pF | ±0.05pF | GJM0222C1E5R6WB01# |  |
|        |               | CH      | 4.0pF | ±0.05pF | GJM0222C1E4R0WB01# |  |        |               |         |       | ±0.1pF  | GJM0222C1E5R6BB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E4R0BB01# |  |        |               |         |       | ±0.25pF | GJM0222C1E5R6CB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E4R0CB01# |  |        |               |         |       | ±0.5pF  | GJM0222C1E5R6DB01# |  |
|        |               |         | 4.1pF | ±0.05pF | GJM0222C1E4R1WB01# |  |        |               |         | 5.7pF | ±0.05pF | GJM0222C1E5R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E4R1BB01# |  |        |               |         |       | ±0.1pF  | GJM0222C1E5R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E4R1CB01# |  |        |               |         |       | ±0.25pF | GJM0222C1E5R7CB01# |  |
|        |               |         | 4.2pF | ±0.05pF | GJM0222C1E4R2WB01# |  |        |               |         |       | ±0.5pF  | GJM0222C1E5R7DB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E4R2BB01# |  |        |               |         | 5.8pF | ±0.05pF | GJM0222C1E5R8WB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E4R2CB01# |  |        |               |         |       | ±0.1pF  | GJM0222C1E5R8BB01# |  |
|        |               |         | 4.3pF | ±0.05pF | GJM0222C1E4R3WB01# |  |        |               |         |       | ±0.25pF | GJM0222C1E5R8CB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E4R3BB01# |  |        |               |         |       | ±0.5pF  | GJM0222C1E5R8DB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E4R3CB01# |  |        |               |         | 5.9pF | ±0.05pF | GJM0222C1E5R9WB01# |  |
|        |               |         | 4.4pF | ±0.05pF | GJM0222C1E4R4WB01# |  |        |               |         |       | ±0.1pF  | GJM0222C1E5R9BB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E4R4BB01# |  |        |               |         |       | ±0.25pF | GJM0222C1E5R9CB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E4R4CB01# |  |        |               |         |       | ±0.5pF  | GJM0222C1E5R9DB01# |  |
|        |               |         | 4.5pF | ±0.05pF | GJM0222C1E4R5WB01# |  |        |               |         | 6.0pF | ±0.05pF | GJM0222C1E6R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E4R5BB01# |  |        |               |         |       | ±0.1pF  | GJM0222C1E6R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E4R5CB01# |  |        |               |         |       | ±0.25pF | GJM0222C1E6R0CB01# |  |
|        |               |         | 4.6pF | ±0.05pF | GJM0222C1E4R6WB01# |  |        |               |         |       | ±0.5pF  | GJM0222C1E6R0DB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E4R6BB01# |  |        |               |         | 6.1pF | ±0.05pF | GJM0222C1E6R1WB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E4R6CB01# |  |        |               |         |       | ±0.1pF  | GJM0222C1E6R1BB01# |  |
|        |               |         | 4.7pF | ±0.05pF | GJM0222C1E4R7WB01# |  |        |               |         |       | ±0.25pF | GJM0222C1E6R1CB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E4R7BB01# |  |        |               |         |       | ±0.5pF  | GJM0222C1E6R1DB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E4R7CB01# |  |        |               |         | 6.2pF | ±0.05pF | GJM0222C1E6R2WB01# |  |
|        |               |         | 4.8pF | ±0.05pF | GJM0222C1E4R8WB01# |  |        |               |         |       | ±0.1pF  | GJM0222C1E6R2BB01# |  |

Part number # indicates the package specification code.

# GJM Series Temperature Compensating Type **High Q** Part Number List

(→ 0.4×0.2mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.    | Tol.               | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|---------|--------------------|--------------------|--|
| 0.22mm | 25Vdc         | CH      | 6.2pF | ±0.25pF | GJM0222C1E6R2CB01# |  | 0.22mm | 25Vdc         | CH      | 7.6pF   | ±0.05pF            | GJM0222C1E7R6WB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E6R2DB01# |  |        |               |         |         | ±0.1pF             | GJM0222C1E7R6BB01# |  |
|        |               |         | 6.3pF | ±0.05pF | GJM0222C1E6R3WB01# |  |        |               |         | ±0.25pF | GJM0222C1E7R6CB01# |                    |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E6R3BB01# |  |        |               |         | ±0.5pF  | GJM0222C1E7R6DB01# |                    |  |
|        |               |         |       | ±0.25pF | GJM0222C1E6R3CB01# |  |        |               |         | 7.7pF   | ±0.05pF            | GJM0222C1E7R7WB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E6R3DB01# |  |        |               |         |         | ±0.1pF             | GJM0222C1E7R7BB01# |  |
|        |               |         | 6.4pF | ±0.05pF | GJM0222C1E6R4WB01# |  |        |               |         |         | ±0.25pF            | GJM0222C1E7R7CB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E6R4BB01# |  |        |               |         |         | ±0.5pF             | GJM0222C1E7R7DB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E6R4CB01# |  |        |               |         | 7.8pF   | ±0.05pF            | GJM0222C1E7R8WB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E6R4DB01# |  |        |               |         |         | ±0.1pF             | GJM0222C1E7R8BB01# |  |
|        |               |         | 6.5pF | ±0.05pF | GJM0222C1E6R5WB01# |  |        |               |         |         | ±0.25pF            | GJM0222C1E7R8CB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E6R5BB01# |  |        |               |         |         | ±0.5pF             | GJM0222C1E7R8DB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E6R5CB01# |  |        |               |         | 7.9pF   | ±0.05pF            | GJM0222C1E7R9WB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E6R5DB01# |  |        |               |         |         | ±0.1pF             | GJM0222C1E7R9BB01# |  |
|        |               |         | 6.6pF | ±0.05pF | GJM0222C1E6R6WB01# |  |        |               |         |         | ±0.25pF            | GJM0222C1E7R9CB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E6R6BB01# |  |        |               |         |         | ±0.5pF             | GJM0222C1E7R9DB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E6R6CB01# |  |        |               |         | 8.0pF   | ±0.05pF            | GJM0222C1E8ROWB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E6R6DB01# |  |        |               |         |         | ±0.1pF             | GJM0222C1E8ROBB01# |  |
|        |               |         | 6.7pF | ±0.05pF | GJM0222C1E6R7WB01# |  |        |               |         |         | ±0.25pF            | GJM0222C1E8ROCBO1# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E6R7BB01# |  |        |               |         |         | ±0.5pF             | GJM0222C1E8RODB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E6R7CB01# |  |        |               |         | 8.1pF   | ±0.05pF            | GJM0222C1E8R1WB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E6R7DB01# |  |        |               |         |         | ±0.1pF             | GJM0222C1E8R1BB01# |  |
|        |               |         | 6.8pF | ±0.05pF | GJM0222C1E6R8WB01# |  |        |               |         |         | ±0.25pF            | GJM0222C1E8R1CB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E6R8BB01# |  |        |               |         |         | ±0.5pF             | GJM0222C1E8R1DB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E6R8CB01# |  |        |               |         | 8.2pF   | ±0.05pF            | GJM0222C1E8R2WB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E6R8DB01# |  |        |               |         |         | ±0.1pF             | GJM0222C1E8R2BB01# |  |
|        |               |         | 6.9pF | ±0.05pF | GJM0222C1E6R9WB01# |  |        |               |         |         | ±0.25pF            | GJM0222C1E8R2CB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E6R9BB01# |  |        |               |         |         | ±0.5pF             | GJM0222C1E8R2DB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E6R9CB01# |  |        |               |         | 8.3pF   | ±0.05pF            | GJM0222C1E8R3WB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E6R9DB01# |  |        |               |         |         | ±0.1pF             | GJM0222C1E8R3BB01# |  |
|        |               |         | 7.0pF | ±0.05pF | GJM0222C1E7R0WB01# |  |        |               |         |         | ±0.25pF            | GJM0222C1E8R3CB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E7R0BB01# |  |        |               |         |         | ±0.5pF             | GJM0222C1E8R3DB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E7R0CB01# |  |        |               |         | 8.4pF   | ±0.05pF            | GJM0222C1E8R4WB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E7R0DB01# |  |        |               |         |         | ±0.1pF             | GJM0222C1E8R4BB01# |  |
|        |               |         | 7.1pF | ±0.05pF | GJM0222C1E7R1WB01# |  |        |               |         |         | ±0.25pF            | GJM0222C1E8R4CB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E7R1BB01# |  |        |               |         |         | ±0.5pF             | GJM0222C1E8R4DB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E7R1CB01# |  |        |               |         | 8.5pF   | ±0.05pF            | GJM0222C1E8R5WB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E7R1DB01# |  |        |               |         |         | ±0.1pF             | GJM0222C1E8R5BB01# |  |
|        |               |         | 7.2pF | ±0.05pF | GJM0222C1E7R2WB01# |  |        |               |         |         | ±0.25pF            | GJM0222C1E8R5CB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E7R2BB01# |  |        |               |         |         | ±0.5pF             | GJM0222C1E8R5DB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E7R2CB01# |  |        |               |         | 8.6pF   | ±0.05pF            | GJM0222C1E8R6WB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E7R2DB01# |  |        |               |         |         | ±0.1pF             | GJM0222C1E8R6BB01# |  |
|        |               |         | 7.3pF | ±0.05pF | GJM0222C1E7R3WB01# |  |        |               |         |         | ±0.25pF            | GJM0222C1E8R6CB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E7R3BB01# |  |        |               |         |         | ±0.5pF             | GJM0222C1E8R6DB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E7R3CB01# |  |        |               |         | 8.7pF   | ±0.05pF            | GJM0222C1E8R7WB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E7R3DB01# |  |        |               |         |         | ±0.1pF             | GJM0222C1E8R7BB01# |  |
|        |               |         | 7.4pF | ±0.05pF | GJM0222C1E7R4WB01# |  |        |               |         |         | ±0.25pF            | GJM0222C1E8R7CB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E7R4BB01# |  |        |               |         |         | ±0.5pF             | GJM0222C1E8R7DB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E7R4CB01# |  |        |               |         | 8.8pF   | ±0.05pF            | GJM0222C1E8R8WB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E7R4DB01# |  |        |               |         |         | ±0.1pF             | GJM0222C1E8R8BB01# |  |
|        |               |         | 7.5pF | ±0.05pF | GJM0222C1E7R5WB01# |  |        |               |         |         | ±0.25pF            | GJM0222C1E8R8CB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E7R5BB01# |  |        |               |         |         | ±0.5pF             | GJM0222C1E8R8DB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E7R5CB01# |  |        |               |         | 8.9pF   | ±0.05pF            | GJM0222C1E8R9WB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E7R5DB01# |  |        |               |         |         | ±0.1pF             | GJM0222C1E8R9BB01# |  |

Part number # indicates the package specification code.

## GJM Series Temperature Compensating Type **High Q** Part Number List

(→ 0.4×0.2mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.22mm | 25Vdc         | CH      | 8.9pF | ±0.25pF | GJM0222C1E8R9CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E8R9DB01# |  |
|        |               |         | 9.0pF | ±0.05pF | GJM0222C1E9R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E9R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E9R0CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E9R0DB01# |  |
|        |               |         | 9.1pF | ±0.05pF | GJM0222C1E9R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E9R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E9R1CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E9R1DB01# |  |
|        |               |         | 9.2pF | ±0.05pF | GJM0222C1E9R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E9R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E9R2CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E9R2DB01# |  |
|        |               |         | 9.3pF | ±0.05pF | GJM0222C1E9R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E9R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E9R3CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E9R3DB01# |  |
|        |               |         | 9.4pF | ±0.05pF | GJM0222C1E9R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E9R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E9R4CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E9R4DB01# |  |
|        |               |         | 9.5pF | ±0.05pF | GJM0222C1E9R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E9R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E9R5CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E9R5DB01# |  |
|        |               |         | 9.6pF | ±0.05pF | GJM0222C1E9R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E9R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E9R6CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E9R6DB01# |  |
|        |               |         | 9.7pF | ±0.05pF | GJM0222C1E9R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E9R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E9R7CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E9R7DB01# |  |
|        |               |         | 9.8pF | ±0.05pF | GJM0222C1E9R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E9R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E9R8CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E9R8DB01# |  |
|        |               |         | 9.9pF | ±0.05pF | GJM0222C1E9R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0222C1E9R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0222C1E9R9CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0222C1E9R9DB01# |  |
|        |               |         | 10pF  | ±2%     | GJM0222C1E100GB01# |  |
|        |               |         |       | ±5%     | GJM0222C1E100JB01# |  |
|        |               |         | 11pF  | ±2%     | GJM0222C1E110GB01# |  |
|        |               |         |       | ±5%     | GJM0222C1E110JB01# |  |
|        |               |         | 12pF  | ±2%     | GJM0222C1E120GB01# |  |
|        |               |         |       | ±5%     | GJM0222C1E120JB01# |  |
|        |               |         | 13pF  | ±2%     | GJM0222C1E130GB01# |  |
|        |               |         |       | ±5%     | GJM0222C1E130JB01# |  |
|        |               |         | 15pF  | ±2%     | GJM0222C1E150GB01# |  |
|        |               |         |       | ±5%     | GJM0222C1E150JB01# |  |
|        |               |         | 16pF  | ±2%     | GJM0222C1E160GB01# |  |
|        |               |         |       | ±5%     | GJM0222C1E160JB01# |  |

| T max. | Rated Voltage | TC Code | Cap. | Tol. | Part Number        |  |
|--------|---------------|---------|------|------|--------------------|--|
| 0.22mm | 25Vdc         | CH      | 18pF | ±2%  | GJM0222C1E180GB01# |  |
|        |               |         |      | ±5%  | GJM0222C1E180JB01# |  |
|        |               |         | 20pF | ±2%  | GJM0222C1E200GB01# |  |
|        |               |         |      | ±5%  | GJM0222C1E200JB01# |  |
|        |               |         | 22pF | ±2%  | GJM0222C1E220GB01# |  |
|        |               |         |      | ±5%  | GJM0222C1E220JB01# |  |

0.6×0.3mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |           |
|--------|---------------|---------|--------|---------|--------------------|-----------|
| 0.33mm | 50Vdc         | COG     | 0.20pF | ±0.05pF | GJM0335C1HR20WB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0335C1HR20BB01# | <b>D1</b> |
|        |               |         | 0.30pF | ±0.05pF | GJM0335C1HR30WB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0335C1HR30BB01# | <b>D1</b> |
|        |               |         | 0.40pF | ±0.05pF | GJM0335C1HR40WB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0335C1HR40BB01# | <b>D1</b> |
|        |               |         | 0.50pF | ±0.05pF | GJM0335C1HR50WB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0335C1HR50BB01# | <b>D1</b> |
|        |               |         | 0.60pF | ±0.05pF | GJM0335C1HR60WB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0335C1HR60BB01# | <b>D1</b> |
|        |               |         | 0.70pF | ±0.05pF | GJM0335C1HR70WB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0335C1HR70BB01# | <b>D1</b> |
|        |               |         | 0.80pF | ±0.05pF | GJM0335C1HR80WB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0335C1HR80BB01# | <b>D1</b> |
|        |               |         | 0.90pF | ±0.05pF | GJM0335C1HR90WB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0335C1HR90BB01# | <b>D1</b> |
|        |               | CK      | 0.20pF | ±0.05pF | GJM0334C1HR20WB01# | <b>D1</b> |
|        |               |         |        | ±0.05pF | GJM0334C1HR30WB01# | <b>D1</b> |
|        |               |         | 0.30pF | ±0.05pF | GJM0334C1HR30WB01# | <b>D1</b> |
|        |               |         |        | ±0.05pF | GJM0334C1HR40WB01# | <b>D1</b> |
|        |               |         | 0.40pF | ±0.05pF | GJM0334C1HR40WB01# | <b>D1</b> |
|        |               |         |        | ±0.05pF | GJM0334C1HR50WB01# | <b>D1</b> |
|        |               |         | 0.50pF | ±0.05pF | GJM0334C1HR50WB01# | <b>D1</b> |
|        |               |         |        | ±0.05pF | GJM0334C1HR60WB01# | <b>D1</b> |
|        |               |         | 0.60pF | ±0.05pF | GJM0334C1HR60WB01# | <b>D1</b> |
|        |               |         |        | ±0.05pF | GJM0334C1HR70WB01# | <b>D1</b> |
|        |               |         | 0.70pF | ±0.05pF | GJM0334C1HR70WB01# | <b>D1</b> |
|        |               |         |        | ±0.05pF | GJM0334C1HR80WB01# | <b>D1</b> |
|        |               |         | 0.80pF | ±0.05pF | GJM0334C1HR80WB01# | <b>D1</b> |
|        |               |         |        | ±0.05pF | GJM0334C1HR90WB01# | <b>D1</b> |
|        |               |         | 0.90pF | ±0.05pF | GJM0334C1HR90WB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0334C1H1R0BB01# | <b>D1</b> |
|        |               |         | 1.0pF  | ±0.1pF  | GJM0334C1H1R0BB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0334C1H1R1BB01# | <b>D1</b> |
|        |               |         | 1.1pF  | ±0.1pF  | GJM0334C1H1R1BB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0334C1H1R2BB01# | <b>D1</b> |
|        |               |         | 1.2pF  | ±0.1pF  | GJM0334C1H1R2BB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0334C1H1R3BB01# | <b>D1</b> |
|        |               |         | 1.3pF  | ±0.1pF  | GJM0334C1H1R3BB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0334C1H1R5BB01# | <b>D1</b> |
|        |               |         | 1.5pF  | ±0.1pF  | GJM0334C1H1R5BB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0334C1H1R6BB01# | <b>D1</b> |
|        |               |         | 1.6pF  | ±0.1pF  | GJM0334C1H1R6BB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0334C1H1R8BB01# | <b>D1</b> |
|        |               |         | 1.8pF  | ±0.1pF  | GJM0334C1H1R8BB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0334C1H2R0BB01# | <b>D1</b> |
|        |               | CJ      | 2.2pF  | ±0.1pF  | GJM0333C1H2R2BB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0333C1H2R4BB01# | <b>D1</b> |
|        |               |         | 2.7pF  | ±0.1pF  | GJM0333C1H2R7BB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0333C1H3R0BB01# | <b>D1</b> |
|        |               |         | 3.0pF  | ±0.1pF  | GJM0333C1H3R3BB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0333C1H3R6BB01# | <b>D1</b> |
|        |               | CH      | 0.20pF | ±0.05pF | GJM0332C1HR20WB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0332C1HR20BB01# | <b>D1</b> |
|        |               |         | 0.30pF | ±0.05pF | GJM0332C1HR30WB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0332C1HR30BB01# | <b>D1</b> |

Part number # indicates the package specification code.

## GJM Series Temperature Compensating Type **High Q** Part Number List

(→ 0.6×0.3mm)

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |           |
|--------|---------------|---------|--------|---------|--------------------|-----------|
| 0.33mm | 50Vdc         | CH      | 0.40pF | ±0.05pF | GJM0332C1HR40WB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0332C1HR40BB01# | <b>D1</b> |
|        |               |         | 0.50pF | ±0.05pF | GJM0332C1HR50WB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0332C1HR50BB01# | <b>D1</b> |
|        |               |         | 0.60pF | ±0.05pF | GJM0332C1HR60WB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0332C1HR60BB01# | <b>D1</b> |
|        |               |         | 0.70pF | ±0.05pF | GJM0332C1HR70WB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0332C1HR70BB01# | <b>D1</b> |
|        |               |         | 0.80pF | ±0.05pF | GJM0332C1HR80WB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0332C1HR80BB01# | <b>D1</b> |
|        |               |         | 0.90pF | ±0.05pF | GJM0332C1HR90WB01# | <b>D1</b> |
|        |               |         |        | ±0.1pF  | GJM0332C1HR90BB01# | <b>D1</b> |
|        | 25Vdc         | COG     | 1.0pF  | ±0.05pF | GJM0335C1E1R0WB01# |           |
|        |               |         |        | ±0.1pF  | GJM0335C1E1R0BB01# |           |
|        |               |         |        | ±0.25pF | GJM0335C1E1R0CB01# |           |
|        |               |         | 1.1pF  | ±0.05pF | GJM0335C1E1R1WB01# |           |
|        |               |         |        | ±0.1pF  | GJM0335C1E1R1BB01# |           |
|        |               |         |        | ±0.25pF | GJM0335C1E1R1CB01# |           |
|        |               |         | 1.2pF  | ±0.05pF | GJM0335C1E1R2WB01# |           |
|        |               |         |        | ±0.1pF  | GJM0335C1E1R2BB01# |           |
|        |               |         |        | ±0.25pF | GJM0335C1E1R2CB01# |           |
|        |               |         | 1.3pF  | ±0.05pF | GJM0335C1E1R3WB01# |           |
|        |               |         |        | ±0.1pF  | GJM0335C1E1R3BB01# |           |
|        |               |         |        | ±0.25pF | GJM0335C1E1R3CB01# |           |
|        |               |         | 1.4pF  | ±0.05pF | GJM0335C1E1R4WB01# |           |
|        |               |         |        | ±0.1pF  | GJM0335C1E1R4BB01# |           |
|        |               |         |        | ±0.25pF | GJM0335C1E1R4CB01# |           |
|        |               |         | 1.5pF  | ±0.05pF | GJM0335C1E1R5WB01# |           |
|        |               |         |        | ±0.1pF  | GJM0335C1E1R5BB01# |           |
|        |               |         |        | ±0.25pF | GJM0335C1E1R5CB01# |           |
|        |               |         | 1.6pF  | ±0.05pF | GJM0335C1E1R6WB01# |           |
|        |               |         |        | ±0.1pF  | GJM0335C1E1R6BB01# |           |
|        |               |         |        | ±0.25pF | GJM0335C1E1R6CB01# |           |
|        |               |         | 1.7pF  | ±0.05pF | GJM0335C1E1R7WB01# |           |
|        |               |         |        | ±0.1pF  | GJM0335C1E1R7BB01# |           |
|        |               |         |        | ±0.25pF | GJM0335C1E1R7CB01# |           |
|        |               |         | 1.8pF  | ±0.05pF | GJM0335C1E1R8WB01# |           |
|        |               |         |        | ±0.1pF  | GJM0335C1E1R8BB01# |           |
|        |               |         |        | ±0.25pF | GJM0335C1E1R8CB01# |           |
|        |               |         | 1.9pF  | ±0.05pF | GJM0335C1E1R9WB01# |           |
|        |               |         |        | ±0.1pF  | GJM0335C1E1R9BB01# |           |
|        |               |         |        | ±0.25pF | GJM0335C1E1R9CB01# |           |
|        |               |         | 2.0pF  | ±0.05pF | GJM0335C1E2R0WB01# |           |
|        |               |         |        | ±0.1pF  | GJM0335C1E2R0BB01# |           |
|        |               |         |        | ±0.25pF | GJM0335C1E2R0CB01# |           |
|        |               |         | 2.1pF  | ±0.05pF | GJM0335C1E2R1WB01# |           |
|        |               |         |        | ±0.1pF  | GJM0335C1E2R1BB01# |           |
|        |               |         |        | ±0.25pF | GJM0335C1E2R1CB01# |           |
|        |               |         | 2.2pF  | ±0.05pF | GJM0335C1E2R2WB01# |           |
|        |               |         |        | ±0.1pF  | GJM0335C1E2R2BB01# |           |
|        |               |         |        | ±0.25pF | GJM0335C1E2R2CB01# |           |
|        |               |         | 2.3pF  | ±0.05pF | GJM0335C1E2R3WB01# |           |
|        |               |         |        | ±0.1pF  | GJM0335C1E2R3BB01# |           |
|        |               |         |        | ±0.25pF | GJM0335C1E2R3CB01# |           |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.33mm | 25Vdc         | COG     | 2.4pF | ±0.05pF | GJM0335C1E2R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E2R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E2R4CB01# |  |
|        |               |         | 2.5pF | ±0.05pF | GJM0335C1E2R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E2R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E2R5CB01# |  |
|        |               |         | 2.6pF | ±0.05pF | GJM0335C1E2R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E2R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E2R6CB01# |  |
|        |               |         | 2.7pF | ±0.05pF | GJM0335C1E2R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E2R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E2R7CB01# |  |
|        |               |         | 2.8pF | ±0.05pF | GJM0335C1E2R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E2R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E2R8CB01# |  |
|        |               |         | 2.9pF | ±0.05pF | GJM0335C1E2R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E2R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E2R9CB01# |  |
|        |               |         | 3.0pF | ±0.05pF | GJM0335C1E3R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E3R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E3R0CB01# |  |
|        |               |         | 3.1pF | ±0.05pF | GJM0335C1E3R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E3R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E3R1CB01# |  |
|        |               |         | 3.2pF | ±0.05pF | GJM0335C1E3R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E3R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E3R2CB01# |  |
|        |               |         | 3.3pF | ±0.05pF | GJM0335C1E3R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E3R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E3R3CB01# |  |
|        |               |         | 3.4pF | ±0.05pF | GJM0335C1E3R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E3R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E3R4CB01# |  |
|        |               |         | 3.5pF | ±0.05pF | GJM0335C1E3R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E3R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E3R5CB01# |  |
|        |               |         | 3.6pF | ±0.05pF | GJM0335C1E3R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E3R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E3R6CB01# |  |
|        |               |         | 3.7pF | ±0.05pF | GJM0335C1E3R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E3R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E3R7CB01# |  |
|        |               |         | 3.8pF | ±0.05pF | GJM0335C1E3R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E3R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E3R8CB01# |  |
|        |               |         | 3.9pF | ±0.05pF | GJM0335C1E3R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E3R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E3R9CB01# |  |
|        |               |         | 4.0pF | ±0.05pF | GJM0335C1E4R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E4R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E4R0CB01# |  |
|        |               |         | 4.1pF | ±0.05pF | GJM0335C1E4R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E4R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E4R1CB01# |  |

Part number # indicates the package specification code.

## GJM Series Temperature Compensating Type High Q Part Number List

(→ 0.6×0.3mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.33mm | 25Vdc         | COG     | 4.2pF | ±0.05pF | GJM0335C1E4R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E4R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E4R2CB01# |  |
|        |               |         | 4.3pF | ±0.05pF | GJM0335C1E4R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E4R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E4R3CB01# |  |
|        |               |         | 4.4pF | ±0.05pF | GJM0335C1E4R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E4R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E4R4CB01# |  |
|        |               |         | 4.5pF | ±0.05pF | GJM0335C1E4R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E4R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E4R5CB01# |  |
|        |               |         | 4.6pF | ±0.05pF | GJM0335C1E4R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E4R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E4R6CB01# |  |
|        |               |         | 4.7pF | ±0.05pF | GJM0335C1E4R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E4R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E4R7CB01# |  |
|        |               |         | 4.8pF | ±0.05pF | GJM0335C1E4R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E4R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E4R8CB01# |  |
|        |               |         | 4.9pF | ±0.05pF | GJM0335C1E4R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E4R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E4R9CB01# |  |
|        |               |         | 5.0pF | ±0.05pF | GJM0335C1E5R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E5R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E5R0CB01# |  |
|        |               |         | 5.1pF | ±0.05pF | GJM0335C1E5R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E5R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E5R1CB01# |  |
|        |               |         | 5.2pF | ±0.05pF | GJM0335C1E5R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E5R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E5R2CB01# |  |
|        |               |         | 5.3pF | ±0.05pF | GJM0335C1E5R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E5R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E5R3CB01# |  |
|        |               |         | 5.4pF | ±0.05pF | GJM0335C1E5R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E5R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E5R4CB01# |  |
|        |               |         | 5.5pF | ±0.05pF | GJM0335C1E5R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E5R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E5R5CB01# |  |
|        |               |         | 5.6pF | ±0.05pF | GJM0335C1E5R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E5R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E5R6CB01# |  |
|        |               |         | 5.7pF | ±0.05pF | GJM0335C1E5R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E5R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E5R7CB01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.33mm | 25Vdc         | COG     | 5.7pF | ±0.5pF  | GJM0335C1E5R7DB01# |  |
|        |               |         |       | ±0.05pF | GJM0335C1E5R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E5R8BB01# |  |
|        |               |         | 5.8pF | ±0.25pF | GJM0335C1E5R8CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E5R8DB01# |  |
|        |               |         | 5.9pF | ±0.05pF | GJM0335C1E5R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E5R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E5R9CB01# |  |
|        |               |         | 6.0pF | ±0.5pF  | GJM0335C1E5R9DB01# |  |
|        |               |         |       | ±0.05pF | GJM0335C1E6R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E6R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E6R0CB01# |  |
|        |               |         | 6.1pF | ±0.5pF  | GJM0335C1E6R0DB01# |  |
|        |               |         |       | ±0.05pF | GJM0335C1E6R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E6R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E6R1CB01# |  |
|        |               |         | 6.2pF | ±0.5pF  | GJM0335C1E6R1DB01# |  |
|        |               |         |       | ±0.05pF | GJM0335C1E6R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E6R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E6R2CB01# |  |
|        |               |         | 6.3pF | ±0.5pF  | GJM0335C1E6R2DB01# |  |
|        |               |         |       | ±0.05pF | GJM0335C1E6R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E6R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E6R3CB01# |  |
|        |               |         | 6.4pF | ±0.5pF  | GJM0335C1E6R3DB01# |  |
|        |               |         |       | ±0.05pF | GJM0335C1E6R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E6R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E6R4CB01# |  |
|        |               |         | 6.5pF | ±0.5pF  | GJM0335C1E6R4DB01# |  |
|        |               |         |       | ±0.05pF | GJM0335C1E6R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E6R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E6R5CB01# |  |
|        |               |         | 6.6pF | ±0.5pF  | GJM0335C1E6R5DB01# |  |
|        |               |         |       | ±0.05pF | GJM0335C1E6R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E6R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E6R6CB01# |  |
|        |               |         | 6.7pF | ±0.5pF  | GJM0335C1E6R6DB01# |  |
|        |               |         |       | ±0.05pF | GJM0335C1E6R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E6R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E6R7CB01# |  |
|        |               |         | 6.8pF | ±0.5pF  | GJM0335C1E6R7DB01# |  |
|        |               |         |       | ±0.05pF | GJM0335C1E6R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E6R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E6R8CB01# |  |
|        |               |         | 6.9pF | ±0.5pF  | GJM0335C1E6R8DB01# |  |
|        |               |         |       | ±0.05pF | GJM0335C1E6R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E6R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E6R9CB01# |  |
|        |               |         | 7.0pF | ±0.5pF  | GJM0335C1E6R9DB01# |  |
|        |               |         |       | ±0.05pF | GJM0335C1E7R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E7R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E7R0CB01# |  |
|        |               |         | 7.1pF | ±0.5pF  | GJM0335C1E7R0DB01# |  |
|        |               |         |       | ±0.05pF | GJM0335C1E7R1WB01# |  |

Part number # indicates the package specification code.

# GJM Series Temperature Compensating Type **High Q** Part Number List

(→ 0.6×0.3mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.33mm | 25Vdc         | COG     | 7.1pF | ±0.1pF  | GJM0335C1E7R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E7R1CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E7R1DB01# |  |
|        |               |         | 7.2pF | ±0.05pF | GJM0335C1E7R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E7R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E7R2CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E7R2DB01# |  |
|        |               |         | 7.3pF | ±0.05pF | GJM0335C1E7R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E7R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E7R3CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E7R3DB01# |  |
|        |               |         | 7.4pF | ±0.05pF | GJM0335C1E7R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E7R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E7R4CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E7R4DB01# |  |
|        |               |         | 7.5pF | ±0.05pF | GJM0335C1E7R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E7R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E7R5CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E7R5DB01# |  |
|        |               |         | 7.6pF | ±0.05pF | GJM0335C1E7R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E7R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E7R6CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E7R6DB01# |  |
|        |               |         | 7.7pF | ±0.05pF | GJM0335C1E7R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E7R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E7R7CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E7R7DB01# |  |
|        |               |         | 7.8pF | ±0.05pF | GJM0335C1E7R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E7R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E7R8CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E7R8DB01# |  |
|        |               |         | 7.9pF | ±0.05pF | GJM0335C1E7R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E7R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E7R9CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E7R9DB01# |  |
|        |               |         | 8.0pF | ±0.05pF | GJM0335C1E8R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E8R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E8R0CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E8R0DB01# |  |
|        |               |         | 8.1pF | ±0.05pF | GJM0335C1E8R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E8R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E8R1CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E8R1DB01# |  |
|        |               |         | 8.2pF | ±0.05pF | GJM0335C1E8R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E8R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E8R2CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E8R2DB01# |  |
|        |               |         | 8.3pF | ±0.05pF | GJM0335C1E8R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E8R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E8R3CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E8R3DB01# |  |
|        |               |         | 8.4pF | ±0.05pF | GJM0335C1E8R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E8R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E8R4CB01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.33mm | 25Vdc         | COG     | 8.4pF | ±0.5pF  | GJM0335C1E8R4DB01# |  |
|        |               |         |       | ±0.05pF | GJM0335C1E8R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E8R5BB01# |  |
|        |               |         | 8.5pF | ±0.25pF | GJM0335C1E8R5CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E8R5DB01# |  |
|        |               |         | 8.6pF | ±0.05pF | GJM0335C1E8R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E8R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E8R6CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E8R6DB01# |  |
|        |               |         | 8.7pF | ±0.05pF | GJM0335C1E8R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E8R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E8R7CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E8R7DB01# |  |
|        |               |         | 8.8pF | ±0.05pF | GJM0335C1E8R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E8R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E8R8CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E8R8DB01# |  |
|        |               |         | 8.9pF | ±0.05pF | GJM0335C1E8R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E8R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E8R9CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E8R9DB01# |  |
|        |               |         | 9.0pF | ±0.05pF | GJM0335C1E9R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E9R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E9R0CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E9R0DB01# |  |
|        |               |         | 9.1pF | ±0.05pF | GJM0335C1E9R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E9R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E9R1CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E9R1DB01# |  |
|        |               |         | 9.2pF | ±0.05pF | GJM0335C1E9R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E9R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E9R2CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E9R2DB01# |  |
|        |               |         | 9.3pF | ±0.05pF | GJM0335C1E9R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E9R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E9R3CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E9R3DB01# |  |
|        |               |         | 9.4pF | ±0.05pF | GJM0335C1E9R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E9R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E9R4CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E9R4DB01# |  |
|        |               |         | 9.5pF | ±0.05pF | GJM0335C1E9R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E9R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E9R5CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E9R5DB01# |  |
|        |               |         | 9.6pF | ±0.05pF | GJM0335C1E9R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E9R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E9R6CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E9R6DB01# |  |
|        |               |         | 9.7pF | ±0.05pF | GJM0335C1E9R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E9R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E9R7CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E9R7DB01# |  |
|        |               |         | 9.8pF | ±0.05pF | GJM0335C1E9R8WB01# |  |
|        |               |         |       | ±0.05pF | GJM0335C1E9R8WB01# |  |

Part number # indicates the package specification code.

# GJM Series Temperature Compensating Type High Q Part Number List

(→ 0.6×0.3mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.33mm | 25Vdc         | COG     | 9.8pF | ±0.1pF  | GJM0335C1E9R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E9R8CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0335C1E9R8DB01# |  |
|        |               |         | 9.9pF | ±0.05pF | GJM0335C1E9R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0335C1E9R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0335C1E9R9CB01# |  |
|        |               |         | 10pF  | ±2%     | GJM0335C1E100GB01# |  |
|        |               |         |       | ±5%     | GJM0335C1E100JB01# |  |
|        |               |         | 11pF  | ±2%     | GJM0335C1E110GB01# |  |
|        |               |         |       | ±5%     | GJM0335C1E110JB01# |  |
|        |               |         | 12pF  | ±2%     | GJM0335C1E120GB01# |  |
|        |               |         |       | ±5%     | GJM0335C1E120JB01# |  |
|        |               |         | 13pF  | ±2%     | GJM0335C1E130GB01# |  |
|        |               |         |       | ±5%     | GJM0335C1E130JB01# |  |
|        |               |         | 15pF  | ±2%     | GJM0335C1E150GB01# |  |
|        |               |         |       | ±5%     | GJM0335C1E150JB01# |  |
|        |               |         | 16pF  | ±2%     | GJM0335C1E160GB01# |  |
|        |               |         |       | ±5%     | GJM0335C1E160JB01# |  |
|        |               |         | 18pF  | ±2%     | GJM0335C1E180GB01# |  |
|        |               |         |       | ±5%     | GJM0335C1E180JB01# |  |
|        |               |         | 20pF  | ±2%     | GJM0335C1E200GB01# |  |
|        |               |         |       | ±5%     | GJM0335C1E200JB01# |  |
|        |               |         | 22pF  | ±2%     | GJM0335C1E220GB01# |  |
|        |               |         |       | ±5%     | GJM0335C1E220JB01# |  |
|        |               |         | 24pF  | ±2%     | GJM0335C1E240GB01# |  |
|        |               |         |       | ±5%     | GJM0335C1E240JB01# |  |
|        |               |         | 27pF  | ±2%     | GJM0335C1E270GB01# |  |
|        |               |         |       | ±5%     | GJM0335C1E270JB01# |  |
|        |               |         | 30pF  | ±2%     | GJM0335C1E300GB01# |  |
|        |               |         |       | ±5%     | GJM0335C1E300JB01# |  |
|        |               |         | 33pF  | ±2%     | GJM0335C1E330GB01# |  |
|        |               |         |       | ±5%     | GJM0335C1E330JB01# |  |
|        |               |         | 1.0pF | ±0.05pF | GJM0334C1E1R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0334C1E1R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0334C1E1R0CB01# |  |
|        |               |         | 1.1pF | ±0.05pF | GJM0334C1E1R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0334C1E1R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0334C1E1R1CB01# |  |
|        |               |         | 1.2pF | ±0.05pF | GJM0334C1E1R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0334C1E1R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0334C1E1R2CB01# |  |
|        |               |         | 1.3pF | ±0.05pF | GJM0334C1E1R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0334C1E1R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0334C1E1R3CB01# |  |
|        |               |         | 1.4pF | ±0.05pF | GJM0334C1E1R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0334C1E1R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0334C1E1R4CB01# |  |
|        |               |         | 1.5pF | ±0.05pF | GJM0334C1E1R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0334C1E1R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0334C1E1R5CB01# |  |
|        |               |         | 1.6pF | ±0.05pF | GJM0334C1E1R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0334C1E1R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0334C1E1R6CB01# |  |
|        |               | CK      | 1.0pF | ±0.05pF | GJM0334C1E1R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0334C1E1R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0334C1E1R0CB01# |  |
|        |               |         | 1.1pF | ±0.05pF | GJM0334C1E1R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0334C1E1R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0334C1E1R1CB01# |  |
|        |               |         | 1.2pF | ±0.05pF | GJM0334C1E1R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0334C1E1R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0334C1E1R2CB01# |  |
|        |               |         | 1.3pF | ±0.05pF | GJM0334C1E1R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0334C1E1R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0334C1E1R3CB01# |  |
|        |               |         | 1.4pF | ±0.05pF | GJM0334C1E1R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0334C1E1R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0334C1E1R4CB01# |  |
|        |               |         | 1.5pF | ±0.05pF | GJM0334C1E1R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0334C1E1R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0334C1E1R5CB01# |  |
|        |               |         | 1.6pF | ±0.05pF | GJM0334C1E1R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0334C1E1R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0334C1E1R6CB01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.33mm | 25Vdc         | CK      | 1.7pF | ±0.05pF | GJM0334C1E1R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0334C1E1R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0334C1E1R7CB01# |  |
|        |               |         | 1.8pF | ±0.05pF | GJM0334C1E1R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0334C1E1R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0334C1E1R8CB01# |  |
|        |               |         | 1.9pF | ±0.05pF | GJM0334C1E1R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0334C1E1R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0334C1E1R9CB01# |  |
|        |               |         | 2.0pF | ±0.05pF | GJM0334C1E2R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0334C1E2R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0334C1E2R0CB01# |  |
|        |               | CJ      | 2.1pF | ±0.05pF | GJM0333C1E2R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0333C1E2R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0333C1E2R1CB01# |  |
|        |               |         | 2.2pF | ±0.05pF | GJM0333C1E2R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0333C1E2R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0333C1E2R2CB01# |  |
|        |               |         | 2.3pF | ±0.05pF | GJM0333C1E2R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0333C1E2R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0333C1E2R3CB01# |  |
|        |               |         | 2.4pF | ±0.05pF | GJM0333C1E2R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0333C1E2R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0333C1E2R4CB01# |  |
|        |               |         | 2.5pF | ±0.05pF | GJM0333C1E2R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0333C1E2R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0333C1E2R5CB01# |  |
|        |               |         | 2.6pF | ±0.05pF | GJM0333C1E2R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0333C1E2R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0333C1E2R6CB01# |  |
|        |               |         | 2.7pF | ±0.05pF | GJM0333C1E2R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0333C1E2R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0333C1E2R7CB01# |  |
|        |               |         | 2.8pF | ±0.05pF | GJM0333C1E2R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0333C1E2R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0333C1E2R8CB01# |  |
|        |               |         | 2.9pF | ±0.05pF | GJM0333C1E2R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0333C1E2R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0333C1E2R9CB01# |  |
|        |               |         | 3.0pF | ±0.05pF | GJM0333C1E3R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0333C1E3R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0333C1E3R0CB01# |  |
|        |               |         | 3.1pF | ±0.05pF | GJM0333C1E3R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0333C1E3R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0333C1E3R1CB01# |  |
|        |               |         | 3.2pF | ±0.05pF | GJM0333C1E3R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0333C1E3R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0333C1E3R2CB01# |  |
|        |               |         | 3.3pF | ±0.05pF | GJM0333C1E3R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0333C1E3R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0333C1E3R3CB01# |  |
|        |               |         | 3.4pF | ±0.05pF | GJM0333C1E3R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0333C1E3R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0333C1E3R4CB01# |  |

Part number # indicates the package specification code.

## GJM Series Temperature Compensating Type **High Q** Part Number List

(→ 0.6×0.3mm)

| T max.  | Rated Voltage      | TC Code | Cap.    | Tol.               | Part Number        |                    | T max. | Rated Voltage | TC Code | Cap.               | Tol.               | Part Number        |                    |  |
|---------|--------------------|---------|---------|--------------------|--------------------|--------------------|--------|---------------|---------|--------------------|--------------------|--------------------|--------------------|--|
| 0.33mm  | 25Vdc              | CJ      | 3.5pF   | ±0.05pF            | GJM0333C1E3R5WB01# |                    | 0.33mm | 25Vdc         | CH      | 5.2pF              | ±0.25pF            | GJM0332C1E5R2CB01# |                    |  |
|         |                    |         |         | ±0.1pF             | GJM0333C1E3R5BB01# |                    |        |               |         |                    | ±0.5pF             | GJM0332C1E5R2DB01# |                    |  |
|         |                    |         |         | ±0.25pF            | GJM0333C1E3R5CB01# |                    |        |               |         |                    | 5.3pF              | ±0.05pF            | GJM0332C1E5R3WB01# |  |
|         |                    |         | 3.6pF   | ±0.05pF            | GJM0333C1E3R6WB01# |                    |        |               |         | ±0.1pF             |                    | GJM0332C1E5R3BB01# |                    |  |
|         |                    |         |         | ±0.1pF             | GJM0333C1E3R6BB01# |                    |        |               |         | ±0.25pF            |                    | GJM0332C1E5R3CB01# |                    |  |
|         |                    |         |         | ±0.25pF            | GJM0333C1E3R6CB01# |                    |        |               |         | ±0.5pF             |                    | GJM0332C1E5R3DB01# |                    |  |
|         |                    |         | 3.7pF   | ±0.05pF            | GJM0333C1E3R7WB01# |                    |        |               |         | 5.4pF              | ±0.05pF            | GJM0332C1E5R4WB01# |                    |  |
|         |                    |         |         | ±0.1pF             | GJM0333C1E3R7BB01# |                    |        |               |         |                    | ±0.1pF             | GJM0332C1E5R4BB01# |                    |  |
|         |                    |         |         | ±0.25pF            | GJM0333C1E3R7CB01# |                    |        |               |         |                    | ±0.25pF            | GJM0332C1E5R4CB01# |                    |  |
|         |                    |         | 3.8pF   | ±0.05pF            | GJM0333C1E3R8WB01# |                    |        |               |         |                    | ±0.5pF             | GJM0332C1E5R4DB01# |                    |  |
|         |                    |         |         | ±0.1pF             | GJM0333C1E3R8BB01# |                    |        |               |         | 5.5pF              | ±0.05pF            | GJM0332C1E5R5WB01# |                    |  |
|         |                    |         |         | ±0.25pF            | GJM0333C1E3R8CB01# |                    |        |               |         |                    | ±0.1pF             | GJM0332C1E5R5BB01# |                    |  |
|         |                    |         | 3.9pF   | ±0.05pF            | GJM0333C1E3R9WB01# |                    |        |               |         |                    | ±0.25pF            | GJM0332C1E5R5CB01# |                    |  |
|         |                    |         |         | ±0.1pF             | GJM0333C1E3R9BB01# |                    |        |               |         |                    | ±0.5pF             | GJM0332C1E5R5DB01# |                    |  |
|         |                    |         |         | ±0.25pF            | GJM0333C1E3R9CB01# |                    |        |               |         | 5.6pF              | ±0.05pF            | GJM0332C1E5R6WB01# |                    |  |
|         |                    |         | CH      | 4.0pF              | ±0.05pF            | GJM0332C1E4R0WB01# |        |               |         |                    |                    | ±0.1pF             | GJM0332C1E5R6BB01# |  |
|         |                    |         |         |                    | ±0.1pF             | GJM0332C1E4R0BB01# |        |               |         |                    |                    | ±0.25pF            | GJM0332C1E5R6CB01# |  |
|         |                    |         |         |                    | ±0.25pF            | GJM0332C1E4R0CB01# |        |               |         |                    |                    | ±0.5pF             | GJM0332C1E5R6DB01# |  |
|         |                    |         |         | 4.1pF              | ±0.05pF            | GJM0332C1E4R1WB01# |        |               |         |                    | 5.7pF              | ±0.05pF            | GJM0332C1E5R7WB01# |  |
|         |                    |         |         |                    | ±0.1pF             | GJM0332C1E4R1BB01# |        |               |         |                    |                    | ±0.1pF             | GJM0332C1E5R7BB01# |  |
|         |                    |         |         |                    | ±0.25pF            | GJM0332C1E4R1CB01# |        |               |         |                    |                    | ±0.25pF            | GJM0332C1E5R7CB01# |  |
|         |                    |         |         | 4.2pF              | ±0.05pF            | GJM0332C1E4R2WB01# |        |               |         |                    |                    | ±0.5pF             | GJM0332C1E5R7DB01# |  |
|         |                    |         |         |                    | ±0.1pF             | GJM0332C1E4R2BB01# |        |               |         |                    | 5.8pF              | ±0.05pF            | GJM0332C1E5R8WB01# |  |
|         |                    |         |         |                    | ±0.25pF            | GJM0332C1E4R2CB01# |        |               |         |                    |                    | ±0.1pF             | GJM0332C1E5R8BB01# |  |
|         |                    |         |         | 4.3pF              | ±0.05pF            | GJM0332C1E4R3WB01# |        |               |         |                    |                    | ±0.25pF            | GJM0332C1E5R8CB01# |  |
|         |                    |         |         |                    | ±0.1pF             | GJM0332C1E4R3BB01# |        |               |         |                    |                    | ±0.5pF             | GJM0332C1E5R8DB01# |  |
|         |                    |         |         |                    | ±0.25pF            | GJM0332C1E4R3CB01# |        |               |         |                    | 5.9pF              | ±0.05pF            | GJM0332C1E5R9WB01# |  |
|         |                    | 4.4pF   |         | ±0.05pF            | GJM0332C1E4R4WB01# |                    |        |               | ±0.1pF  | GJM0332C1E5R9BB01# |                    |                    |                    |  |
|         |                    |         |         | ±0.1pF             | GJM0332C1E4R4BB01# |                    |        |               | ±0.25pF | GJM0332C1E5R9CB01# |                    |                    |                    |  |
|         |                    |         |         | ±0.25pF            | GJM0332C1E4R4CB01# |                    |        |               | ±0.5pF  | GJM0332C1E5R9DB01# |                    |                    |                    |  |
|         |                    | 4.5pF   |         | ±0.05pF            | GJM0332C1E4R5WB01# |                    |        |               | 6.0pF   | ±0.05pF            | GJM0332C1E6R0WB01# |                    |                    |  |
|         |                    |         |         | ±0.1pF             | GJM0332C1E4R5BB01# |                    |        |               |         | ±0.1pF             | GJM0332C1E6R0BB01# |                    |                    |  |
|         |                    |         |         | ±0.25pF            | GJM0332C1E4R5CB01# |                    |        |               |         | ±0.25pF            | GJM0332C1E6R0CB01# |                    |                    |  |
|         |                    | 4.6pF   |         | ±0.05pF            | GJM0332C1E4R6WB01# |                    |        |               |         | ±0.5pF             | GJM0332C1E6R0DB01# |                    |                    |  |
|         |                    |         |         | ±0.1pF             | GJM0332C1E4R6BB01# |                    |        |               | 6.1pF   | ±0.05pF            | GJM0332C1E6R1WB01# |                    |                    |  |
|         |                    |         |         | ±0.25pF            | GJM0332C1E4R6CB01# |                    |        |               |         | ±0.1pF             | GJM0332C1E6R1BB01# |                    |                    |  |
|         |                    | 4.7pF   |         | ±0.05pF            | GJM0332C1E4R7WB01# |                    |        |               |         | ±0.25pF            | GJM0332C1E6R1CB01# |                    |                    |  |
|         |                    |         |         | ±0.1pF             | GJM0332C1E4R7BB01# |                    |        |               |         | ±0.5pF             | GJM0332C1E6R1DB01# |                    |                    |  |
|         |                    |         |         | ±0.25pF            | GJM0332C1E4R7CB01# |                    |        |               | 6.2pF   | ±0.05pF            | GJM0332C1E6R2WB01# |                    |                    |  |
|         |                    | 4.8pF   |         | ±0.05pF            | GJM0332C1E4R8WB01# |                    |        |               |         | ±0.1pF             | GJM0332C1E6R2BB01# |                    |                    |  |
|         |                    |         |         | ±0.1pF             | GJM0332C1E4R8BB01# |                    |        |               |         | ±0.25pF            | GJM0332C1E6R2CB01# |                    |                    |  |
|         |                    |         |         | ±0.25pF            | GJM0332C1E4R8CB01# |                    |        |               |         | ±0.5pF             | GJM0332C1E6R2DB01# |                    |                    |  |
|         |                    | 4.9pF   | ±0.05pF | GJM0332C1E4R9WB01# |                    | 6.3pF              |        |               | ±0.05pF | GJM0332C1E6R3WB01# |                    |                    |                    |  |
|         |                    |         | ±0.1pF  | GJM0332C1E4R9BB01# |                    |                    |        |               | ±0.1pF  | GJM0332C1E6R3BB01# |                    |                    |                    |  |
|         |                    |         | ±0.25pF | GJM0332C1E4R9CB01# |                    |                    |        |               | ±0.25pF | GJM0332C1E6R3CB01# |                    |                    |                    |  |
|         |                    | 5.0pF   | ±0.05pF | GJM0332C1E5R0WB01# |                    |                    |        |               | ±0.5pF  | GJM0332C1E6R3DB01# |                    |                    |                    |  |
|         |                    |         | ±0.1pF  | GJM0332C1E5R0BB01# |                    | 6.4pF              |        |               | ±0.05pF | GJM0332C1E6R4WB01# |                    |                    |                    |  |
|         |                    |         | ±0.25pF | GJM0332C1E5R0CB01# |                    |                    |        |               | ±0.1pF  | GJM0332C1E6R4BB01# |                    |                    |                    |  |
|         |                    | 5.1pF   | ±0.05pF | GJM0332C1E5R1WB01# |                    |                    |        |               | ±0.25pF | GJM0332C1E6R4CB01# |                    |                    |                    |  |
|         |                    |         | ±0.1pF  | GJM0332C1E5R1BB01# |                    |                    |        |               | ±0.5pF  | GJM0332C1E6R4DB01# |                    |                    |                    |  |
|         |                    |         | ±0.25pF | GJM0332C1E5R1CB01# |                    | 6.5pF              |        |               | ±0.05pF | GJM0332C1E6R5WB01# |                    |                    |                    |  |
|         |                    | 5.2pF   | ±0.05pF | GJM0332C1E5R2WB01# |                    |                    |        |               | ±0.1pF  | GJM0332C1E6R5BB01# |                    |                    |                    |  |
|         |                    |         | ±0.1pF  | GJM0332C1E5R2BB01# |                    |                    |        |               | ±0.25pF | GJM0332C1E6R5CB01# |                    |                    |                    |  |
| ±0.25pF | GJM0332C1E5R2CB01# |         |         | ±0.5pF             | GJM0332C1E6R5DB01# |                    |        |               |         |                    |                    |                    |                    |  |

Part number # indicates the package specification code.

## GJM Series Temperature Compensating Type High Q Part Number List

(→ 0.6×0.3mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.33mm | 25Vdc         | CH      | 6.6pF | ±0.05pF | GJM0332C1E6R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E6R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E6R6CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E6R6DB01# |  |
|        |               |         | 6.7pF | ±0.05pF | GJM0332C1E6R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E6R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E6R7CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E6R7DB01# |  |
|        |               |         | 6.8pF | ±0.05pF | GJM0332C1E6R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E6R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E6R8CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E6R8DB01# |  |
|        |               |         | 6.9pF | ±0.05pF | GJM0332C1E6R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E6R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E6R9CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E6R9DB01# |  |
|        |               |         | 7.0pF | ±0.05pF | GJM0332C1E7R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E7R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E7R0CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E7R0DB01# |  |
|        |               |         | 7.1pF | ±0.05pF | GJM0332C1E7R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E7R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E7R1CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E7R1DB01# |  |
|        |               |         | 7.2pF | ±0.05pF | GJM0332C1E7R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E7R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E7R2CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E7R2DB01# |  |
|        |               |         | 7.3pF | ±0.05pF | GJM0332C1E7R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E7R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E7R3CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E7R3DB01# |  |
|        |               |         | 7.4pF | ±0.05pF | GJM0332C1E7R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E7R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E7R4CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E7R4DB01# |  |
|        |               |         | 7.5pF | ±0.05pF | GJM0332C1E7R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E7R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E7R5CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E7R5DB01# |  |
|        |               |         | 7.6pF | ±0.05pF | GJM0332C1E7R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E7R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E7R6CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E7R6DB01# |  |
|        |               |         | 7.7pF | ±0.05pF | GJM0332C1E7R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E7R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E7R7CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E7R7DB01# |  |
|        |               |         | 7.8pF | ±0.05pF | GJM0332C1E7R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E7R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E7R8CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E7R8DB01# |  |
|        |               |         | 7.9pF | ±0.05pF | GJM0332C1E7R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E7R9BB01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.33mm | 25Vdc         | CH      | 7.9pF | ±0.25pF | GJM0332C1E7R9CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E7R9DB01# |  |
|        |               |         | 8.0pF | ±0.05pF | GJM0332C1E8R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E8R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E8R0CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E8R0DB01# |  |
|        |               |         | 8.1pF | ±0.05pF | GJM0332C1E8R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E8R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E8R1CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E8R1DB01# |  |
|        |               |         | 8.2pF | ±0.05pF | GJM0332C1E8R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E8R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E8R2CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E8R2DB01# |  |
|        |               |         | 8.3pF | ±0.05pF | GJM0332C1E8R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E8R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E8R3CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E8R3DB01# |  |
|        |               |         | 8.4pF | ±0.05pF | GJM0332C1E8R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E8R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E8R4CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E8R4DB01# |  |
|        |               |         | 8.5pF | ±0.05pF | GJM0332C1E8R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E8R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E8R5CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E8R5DB01# |  |
|        |               |         | 8.6pF | ±0.05pF | GJM0332C1E8R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E8R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E8R6CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E8R6DB01# |  |
|        |               |         | 8.7pF | ±0.05pF | GJM0332C1E8R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E8R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E8R7CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E8R7DB01# |  |
|        |               |         | 8.8pF | ±0.05pF | GJM0332C1E8R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E8R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E8R8CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E8R8DB01# |  |
|        |               |         | 8.9pF | ±0.05pF | GJM0332C1E8R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E8R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E8R9CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E8R9DB01# |  |
|        |               |         | 9.0pF | ±0.05pF | GJM0332C1E9R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E9R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E9R0CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E9R0DB01# |  |
|        |               |         | 9.1pF | ±0.05pF | GJM0332C1E9R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E9R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E9R1CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E9R1DB01# |  |
|        |               |         | 9.2pF | ±0.05pF | GJM0332C1E9R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E9R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E9R2CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E9R2DB01# |  |

Part number # indicates the package specification code.

# GJM Series Temperature Compensating Type High Q Part Number List

(→ 0.6×0.3mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.33mm | 25Vdc         | CH      | 9.3pF | ±0.05pF | GJM0332C1E9R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E9R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E9R3CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E9R3DB01# |  |
|        |               |         | 9.4pF | ±0.05pF | GJM0332C1E9R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E9R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E9R4CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E9R4DB01# |  |
|        |               |         | 9.5pF | ±0.05pF | GJM0332C1E9R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E9R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E9R5CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E9R5DB01# |  |
|        |               |         | 9.6pF | ±0.05pF | GJM0332C1E9R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E9R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E9R6CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E9R6DB01# |  |
|        |               |         | 9.7pF | ±0.05pF | GJM0332C1E9R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E9R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E9R7CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E9R7DB01# |  |
|        |               |         | 9.8pF | ±0.05pF | GJM0332C1E9R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E9R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E9R8CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E9R8DB01# |  |
|        |               |         | 9.9pF | ±0.05pF | GJM0332C1E9R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM0332C1E9R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM0332C1E9R9CB01# |  |
|        |               |         |       | ±0.5pF  | GJM0332C1E9R9DB01# |  |
|        |               |         | 10pF  | ±2%     | GJM0332C1E100GB01# |  |
|        |               |         |       | ±5%     | GJM0332C1E100JB01# |  |
|        |               |         | 11pF  | ±2%     | GJM0332C1E110GB01# |  |
|        |               |         |       | ±5%     | GJM0332C1E110JB01# |  |
|        |               |         | 12pF  | ±2%     | GJM0332C1E120GB01# |  |
|        |               |         |       | ±5%     | GJM0332C1E120JB01# |  |
|        |               |         | 13pF  | ±2%     | GJM0332C1E130GB01# |  |
|        |               |         |       | ±5%     | GJM0332C1E130JB01# |  |
|        |               |         | 15pF  | ±2%     | GJM0332C1E150GB01# |  |
|        |               |         |       | ±5%     | GJM0332C1E150JB01# |  |
|        |               |         | 16pF  | ±2%     | GJM0332C1E160GB01# |  |
|        |               |         |       | ±5%     | GJM0332C1E160JB01# |  |
|        |               |         | 18pF  | ±2%     | GJM0332C1E180GB01# |  |
|        |               |         |       | ±5%     | GJM0332C1E180JB01# |  |
|        |               |         | 20pF  | ±2%     | GJM0332C1E200GB01# |  |
|        |               |         |       | ±5%     | GJM0332C1E200JB01# |  |
|        |               |         | 22pF  | ±2%     | GJM0332C1E220GB01# |  |
|        |               |         |       | ±5%     | GJM0332C1E220JB01# |  |
|        |               |         | 24pF  | ±2%     | GJM0332C1E240GB01# |  |
|        |               |         |       | ±5%     | GJM0332C1E240JB01# |  |
|        |               |         | 27pF  | ±2%     | GJM0332C1E270GB01# |  |
|        |               |         |       | ±5%     | GJM0332C1E270JB01# |  |
|        |               |         | 30pF  | ±2%     | GJM0332C1E300GB01# |  |
|        |               |         |       | ±5%     | GJM0332C1E300JB01# |  |
|        |               |         | 33pF  | ±2%     | GJM0332C1E330GB01# |  |
|        |               |         |       | ±5%     | GJM0332C1E330JB01# |  |

1.0×0.5mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |  |
|--------|---------------|---------|--------|---------|--------------------|--|
| 0.55mm | 50Vdc         | COG     | 0.10pF | ±0.05pF | GJM1555C1HR10WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1HR10BB01# |  |
|        |               |         | 0.20pF | ±0.05pF | GJM1555C1HR20WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1HR20BB01# |  |
|        |               |         | 0.30pF | ±0.05pF | GJM1555C1HR30WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1HR30BB01# |  |
|        |               |         | 0.40pF | ±0.05pF | GJM1555C1HR40WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1HR40BB01# |  |
|        |               |         | 0.50pF | ±0.05pF | GJM1555C1HR50WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1HR50BB01# |  |
|        |               |         | 0.60pF | ±0.05pF | GJM1555C1HR60WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1HR60BB01# |  |
|        |               |         | 0.70pF | ±0.05pF | GJM1555C1HR70WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1HR70BB01# |  |
|        |               |         | 0.80pF | ±0.05pF | GJM1555C1HR80WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1HR80BB01# |  |
|        |               |         | 0.90pF | ±0.05pF | GJM1555C1HR90WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1HR90BB01# |  |
|        |               |         | 1.0pF  | ±0.05pF | GJM1555C1H1R0WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1H1R0BB01# |  |
|        |               |         |        | ±0.25pF | GJM1555C1H1R0CB01# |  |
|        |               |         | 1.1pF  | ±0.05pF | GJM1555C1H1R1WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1H1R1BB01# |  |
|        |               |         |        | ±0.25pF | GJM1555C1H1R1CB01# |  |
|        |               |         | 1.2pF  | ±0.05pF | GJM1555C1H1R2WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1H1R2BB01# |  |
|        |               |         |        | ±0.25pF | GJM1555C1H1R2CB01# |  |
|        |               |         | 1.3pF  | ±0.05pF | GJM1555C1H1R3WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1H1R3BB01# |  |
|        |               |         |        | ±0.25pF | GJM1555C1H1R3CB01# |  |
|        |               |         | 1.4pF  | ±0.05pF | GJM1555C1H1R4WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1H1R4BB01# |  |
|        |               |         |        | ±0.25pF | GJM1555C1H1R4CB01# |  |
|        |               |         | 1.5pF  | ±0.05pF | GJM1555C1H1R5WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1H1R5BB01# |  |
|        |               |         |        | ±0.25pF | GJM1555C1H1R5CB01# |  |
|        |               |         | 1.6pF  | ±0.05pF | GJM1555C1H1R6WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1H1R6BB01# |  |
|        |               |         |        | ±0.25pF | GJM1555C1H1R6CB01# |  |
|        |               |         | 1.7pF  | ±0.05pF | GJM1555C1H1R7WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1H1R7BB01# |  |
|        |               |         |        | ±0.25pF | GJM1555C1H1R7CB01# |  |
|        |               |         | 1.8pF  | ±0.05pF | GJM1555C1H1R8WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1H1R8BB01# |  |
|        |               |         |        | ±0.25pF | GJM1555C1H1R8CB01# |  |
|        |               |         | 1.9pF  | ±0.05pF | GJM1555C1H1R9WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1H1R9BB01# |  |
|        |               |         |        | ±0.25pF | GJM1555C1H1R9CB01# |  |
|        |               |         | 2.0pF  | ±0.05pF | GJM1555C1H2R0WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1555C1H2R0BB01# |  |
|        |               |         |        | ±0.25pF | GJM1555C1H2R0CB01# |  |
|        |               |         | 2.1pF  | ±0.05pF | GJM1555C1H2R1WB01# |  |

Part number # indicates the package specification code.

# GJM Series Temperature Compensating Type High Q Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 50Vdc         | COG     | 2.1pF | ±0.1pF  | GJM1555C1H2R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H2R1CB01# |  |
|        |               |         | 2.2pF | ±0.05pF | GJM1555C1H2R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H2R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H2R2CB01# |  |
|        |               |         | 2.3pF | ±0.05pF | GJM1555C1H2R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H2R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H2R3CB01# |  |
|        |               |         | 2.4pF | ±0.05pF | GJM1555C1H2R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H2R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H2R4CB01# |  |
|        |               |         | 2.5pF | ±0.05pF | GJM1555C1H2R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H2R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H2R5CB01# |  |
|        |               |         | 2.6pF | ±0.05pF | GJM1555C1H2R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H2R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H2R6CB01# |  |
|        |               |         | 2.7pF | ±0.05pF | GJM1555C1H2R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H2R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H2R7CB01# |  |
|        |               |         | 2.8pF | ±0.05pF | GJM1555C1H2R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H2R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H2R8CB01# |  |
|        |               |         | 2.9pF | ±0.05pF | GJM1555C1H2R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H2R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H2R9CB01# |  |
|        |               |         | 3.0pF | ±0.05pF | GJM1555C1H3R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H3R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H3R0CB01# |  |
|        |               |         | 3.1pF | ±0.05pF | GJM1555C1H3R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H3R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H3R1CB01# |  |
|        |               |         | 3.2pF | ±0.05pF | GJM1555C1H3R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H3R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H3R2CB01# |  |
|        |               |         | 3.3pF | ±0.05pF | GJM1555C1H3R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H3R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H3R3CB01# |  |
|        |               |         | 3.4pF | ±0.05pF | GJM1555C1H3R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H3R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H3R4CB01# |  |
|        |               |         | 3.5pF | ±0.05pF | GJM1555C1H3R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H3R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H3R5CB01# |  |
|        |               |         | 3.6pF | ±0.05pF | GJM1555C1H3R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H3R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H3R6CB01# |  |
|        |               |         | 3.7pF | ±0.05pF | GJM1555C1H3R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H3R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H3R7CB01# |  |
|        |               |         | 3.8pF | ±0.05pF | GJM1555C1H3R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H3R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H3R8CB01# |  |
|        |               |         | 3.9pF | ±0.05pF | GJM1555C1H3R9WB01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 50Vdc         | COG     | 3.9pF | ±0.1pF  | GJM1555C1H3R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H3R9CB01# |  |
|        |               |         | 4.0pF | ±0.05pF | GJM1555C1H4R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H4R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H4R0CB01# |  |
|        |               |         | 4.1pF | ±0.05pF | GJM1555C1H4R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H4R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H4R1CB01# |  |
|        |               |         | 4.2pF | ±0.05pF | GJM1555C1H4R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H4R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H4R2CB01# |  |
|        |               |         | 4.3pF | ±0.05pF | GJM1555C1H4R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H4R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H4R3CB01# |  |
|        |               |         | 4.4pF | ±0.05pF | GJM1555C1H4R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H4R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H4R4CB01# |  |
|        |               |         | 4.5pF | ±0.05pF | GJM1555C1H4R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H4R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H4R5CB01# |  |
|        |               |         | 4.6pF | ±0.05pF | GJM1555C1H4R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H4R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H4R6CB01# |  |
|        |               |         | 4.7pF | ±0.05pF | GJM1555C1H4R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H4R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H4R7CB01# |  |
|        |               |         | 4.8pF | ±0.05pF | GJM1555C1H4R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H4R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H4R8CB01# |  |
|        |               |         | 4.9pF | ±0.05pF | GJM1555C1H4R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H4R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H4R9CB01# |  |
|        |               |         | 5.0pF | ±0.05pF | GJM1555C1H5R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H5R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H5R0CB01# |  |
|        |               |         | 5.1pF | ±0.05pF | GJM1555C1H5R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H5R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H5R1CB01# |  |
|        |               |         | 5.2pF | ±0.05pF | GJM1555C1H5R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H5R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H5R2CB01# |  |
|        |               |         | 5.3pF | ±0.05pF | GJM1555C1H5R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H5R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H5R3CB01# |  |
|        |               |         | 5.4pF | ±0.05pF | GJM1555C1H5R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H5R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H5R4CB01# |  |
|        |               |         | 5.5pF | ±0.05pF | GJM1555C1H5R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H5R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H5R5CB01# |  |

Part number # indicates the package specification code.

## GJM Series Temperature Compensating Type **High Q** Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |
|--------|---------------|---------|-------|---------|--------------------|
| 0.55mm | 50Vdc         | COG     | 5.5pF | ±0.5pF  | GJM1555C1H5R5DB01# |
|        |               |         |       | ±0.05pF | GJM1555C1H5R6WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H5R6BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H5R6CB01# |
|        |               |         | 5.6pF | ±0.5pF  | GJM1555C1H5R6DB01# |
|        |               |         |       | ±0.05pF | GJM1555C1H5R7WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H5R7BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H5R7CB01# |
|        |               |         | 5.7pF | ±0.5pF  | GJM1555C1H5R7DB01# |
|        |               |         |       | ±0.05pF | GJM1555C1H5R8WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H5R8BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H5R8CB01# |
|        |               |         | 5.8pF | ±0.5pF  | GJM1555C1H5R8DB01# |
|        |               |         |       | ±0.05pF | GJM1555C1H5R9WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H5R9BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H5R9CB01# |
|        |               |         | 5.9pF | ±0.5pF  | GJM1555C1H5R9DB01# |
|        |               |         |       | ±0.05pF | GJM1555C1H6R0WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H6R0BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H6R0CB01# |
|        |               |         | 6.0pF | ±0.5pF  | GJM1555C1H6R0DB01# |
|        |               |         |       | ±0.05pF | GJM1555C1H6R1WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H6R1BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H6R1CB01# |
|        |               |         | 6.1pF | ±0.5pF  | GJM1555C1H6R1DB01# |
|        |               |         |       | ±0.05pF | GJM1555C1H6R2WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H6R2BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H6R2CB01# |
|        |               |         | 6.2pF | ±0.5pF  | GJM1555C1H6R2DB01# |
|        |               |         |       | ±0.05pF | GJM1555C1H6R3WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H6R3BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H6R3CB01# |
|        |               |         | 6.3pF | ±0.5pF  | GJM1555C1H6R3DB01# |
|        |               |         |       | ±0.05pF | GJM1555C1H6R4WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H6R4BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H6R4CB01# |
|        |               |         | 6.4pF | ±0.5pF  | GJM1555C1H6R4DB01# |
|        |               |         |       | ±0.05pF | GJM1555C1H6R5WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H6R5BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H6R5CB01# |
|        |               |         | 6.5pF | ±0.5pF  | GJM1555C1H6R5DB01# |
|        |               |         |       | ±0.05pF | GJM1555C1H6R6WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H6R6BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H6R6CB01# |
|        |               |         | 6.6pF | ±0.5pF  | GJM1555C1H6R6DB01# |
|        |               |         |       | ±0.05pF | GJM1555C1H6R7WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H6R7BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H6R7CB01# |
|        |               |         | 6.7pF | ±0.5pF  | GJM1555C1H6R7DB01# |
|        |               |         |       | ±0.05pF | GJM1555C1H6R8WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H6R8BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H6R8CB01# |
|        |               |         | 6.8pF | ±0.5pF  | GJM1555C1H6R8DB01# |
|        |               |         |       | ±0.05pF | GJM1555C1H6R9WB01# |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |
|--------|---------------|---------|-------|---------|--------------------|
| 0.55mm | 50Vdc         | COG     | 6.9pF | ±0.1pF  | GJM1555C1H6R9BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H6R9CB01# |
|        |               |         |       | ±0.5pF  | GJM1555C1H6R9DB01# |
|        |               |         | 7.0pF | ±0.05pF | GJM1555C1H7R0WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H7R0BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H7R0CB01# |
|        |               |         |       | ±0.5pF  | GJM1555C1H7R0DB01# |
|        |               |         | 7.1pF | ±0.05pF | GJM1555C1H7R1WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H7R1BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H7R1CB01# |
|        |               |         |       | ±0.5pF  | GJM1555C1H7R1DB01# |
|        |               |         | 7.2pF | ±0.05pF | GJM1555C1H7R2WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H7R2BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H7R2CB01# |
|        |               |         |       | ±0.5pF  | GJM1555C1H7R2DB01# |
|        |               |         | 7.3pF | ±0.05pF | GJM1555C1H7R3WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H7R3BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H7R3CB01# |
|        |               |         |       | ±0.5pF  | GJM1555C1H7R3DB01# |
|        |               |         | 7.4pF | ±0.05pF | GJM1555C1H7R4WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H7R4BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H7R4CB01# |
|        |               |         |       | ±0.5pF  | GJM1555C1H7R4DB01# |
|        |               |         | 7.5pF | ±0.05pF | GJM1555C1H7R5WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H7R5BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H7R5CB01# |
|        |               |         |       | ±0.5pF  | GJM1555C1H7R5DB01# |
|        |               |         | 7.6pF | ±0.05pF | GJM1555C1H7R6WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H7R6BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H7R6CB01# |
|        |               |         |       | ±0.5pF  | GJM1555C1H7R6DB01# |
|        |               |         | 7.7pF | ±0.05pF | GJM1555C1H7R7WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H7R7BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H7R7CB01# |
|        |               |         |       | ±0.5pF  | GJM1555C1H7R7DB01# |
|        |               |         | 7.8pF | ±0.05pF | GJM1555C1H7R8WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H7R8BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H7R8CB01# |
|        |               |         |       | ±0.5pF  | GJM1555C1H7R8DB01# |
|        |               |         | 7.9pF | ±0.05pF | GJM1555C1H7R9WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H7R9BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H7R9CB01# |
|        |               |         |       | ±0.5pF  | GJM1555C1H7R9DB01# |
|        |               |         | 8.0pF | ±0.05pF | GJM1555C1H8R0WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H8R0BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H8R0CB01# |
|        |               |         |       | ±0.5pF  | GJM1555C1H8R0DB01# |
|        |               |         | 8.1pF | ±0.05pF | GJM1555C1H8R1WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H8R1BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H8R1CB01# |
|        |               |         |       | ±0.5pF  | GJM1555C1H8R1DB01# |
|        |               |         | 8.2pF | ±0.05pF | GJM1555C1H8R2WB01# |
|        |               |         |       | ±0.1pF  | GJM1555C1H8R2BB01# |
|        |               |         |       | ±0.25pF | GJM1555C1H8R2CB01# |

Part number # indicates the package specification code.

# GJM Series Temperature Compensating Type High Q Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 50Vdc         | COG     | 8.2pF | ±0.5pF  | GJM1555C1H8R2DB01# |  |
|        |               |         |       | ±0.05pF | GJM1555C1H8R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H8R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H8R3CB01# |  |
|        |               |         | 8.4pF | ±0.5pF  | GJM1555C1H8R3DB01# |  |
|        |               |         |       | ±0.05pF | GJM1555C1H8R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H8R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H8R4CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1555C1H8R4DB01# |  |
|        |               |         | 8.5pF | ±0.05pF | GJM1555C1H8R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H8R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H8R5CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1555C1H8R5DB01# |  |
|        |               |         | 8.6pF | ±0.05pF | GJM1555C1H8R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H8R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H8R6CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1555C1H8R6DB01# |  |
|        |               |         | 8.7pF | ±0.05pF | GJM1555C1H8R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H8R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H8R7CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1555C1H8R7DB01# |  |
|        |               |         | 8.8pF | ±0.05pF | GJM1555C1H8R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H8R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H8R8CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1555C1H8R8DB01# |  |
|        |               |         | 8.9pF | ±0.05pF | GJM1555C1H8R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H8R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H8R9CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1555C1H8R9DB01# |  |
|        |               |         | 9.0pF | ±0.05pF | GJM1555C1H9R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H9R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H9R0CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1555C1H9R0DB01# |  |
|        |               |         | 9.1pF | ±0.05pF | GJM1555C1H9R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H9R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H9R1CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1555C1H9R1DB01# |  |
|        |               |         | 9.2pF | ±0.05pF | GJM1555C1H9R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H9R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H9R2CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1555C1H9R2DB01# |  |
|        |               |         | 9.3pF | ±0.05pF | GJM1555C1H9R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H9R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H9R3CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1555C1H9R3DB01# |  |
|        |               |         | 9.4pF | ±0.05pF | GJM1555C1H9R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H9R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H9R4CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1555C1H9R4DB01# |  |
|        |               |         | 9.5pF | ±0.05pF | GJM1555C1H9R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H9R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H9R5CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1555C1H9R5DB01# |  |
|        |               |         | 9.6pF | ±0.05pF | GJM1555C1H9R6WB01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 50Vdc         | COG     | 9.6pF | ±0.1pF  | GJM1555C1H9R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H9R6CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1555C1H9R6DB01# |  |
|        |               |         | 9.7pF | ±0.05pF | GJM1555C1H9R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H9R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H9R7CB01# |  |
|        |               |         | 9.8pF | ±0.05pF | GJM1555C1H9R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H9R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H9R8CB01# |  |
|        |               |         | 9.9pF | ±0.05pF | GJM1555C1H9R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1555C1H9R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM1555C1H9R9CB01# |  |
|        |               |         | 10pF  | ±2%     | GJM1555C1H100GB01# |  |
|        |               |         |       | ±5%     | GJM1555C1H100JB01# |  |
|        |               |         | 11pF  | ±2%     | GJM1555C1H110GB01# |  |
|        |               |         |       | ±5%     | GJM1555C1H110JB01# |  |
|        |               |         | 12pF  | ±2%     | GJM1555C1H120GB01# |  |
|        |               |         |       | ±5%     | GJM1555C1H120JB01# |  |
|        |               |         | 13pF  | ±2%     | GJM1555C1H130GB01# |  |
|        |               |         |       | ±5%     | GJM1555C1H130JB01# |  |
|        |               |         | 15pF  | ±2%     | GJM1555C1H150GB01# |  |
|        |               |         |       | ±5%     | GJM1555C1H150JB01# |  |
|        |               |         | 16pF  | ±2%     | GJM1555C1H160GB01# |  |
|        |               |         |       | ±5%     | GJM1555C1H160JB01# |  |
|        |               |         | 18pF  | ±2%     | GJM1555C1H180GB01# |  |
|        |               |         |       | ±5%     | GJM1555C1H180JB01# |  |
|        |               |         | 20pF  | ±2%     | GJM1555C1H200GB01# |  |
|        |               |         |       | ±5%     | GJM1555C1H200JB01# |  |
|        |               |         | 22pF  | ±1%     | GJM1555C1H220FB01# |  |
|        |               |         |       | ±2%     | GJM1555C1H220GB01# |  |
|        |               |         |       | ±5%     | GJM1555C1H220JB01# |  |
|        |               |         | 24pF  | ±1%     | GJM1555C1H240FB01# |  |
|        |               |         |       | ±2%     | GJM1555C1H240GB01# |  |
|        |               |         |       | ±5%     | GJM1555C1H240JB01# |  |
|        |               |         | 27pF  | ±1%     | GJM1555C1H270FB01# |  |
|        |               |         |       | ±2%     | GJM1555C1H270GB01# |  |
|        |               |         |       | ±5%     | GJM1555C1H270JB01# |  |
|        |               |         | 30pF  | ±1%     | GJM1555C1H300FB01# |  |
|        |               |         |       | ±2%     | GJM1555C1H300GB01# |  |
|        |               |         |       | ±5%     | GJM1555C1H300JB01# |  |
|        |               |         | 33pF  | ±1%     | GJM1555C1H330FB01# |  |
|        |               |         |       | ±2%     | GJM1555C1H330GB01# |  |
|        |               |         |       | ±5%     | GJM1555C1H330JB01# |  |
|        |               |         | 36pF  | ±1%     | GJM1555C1H360FB01# |  |
|        |               |         |       | ±2%     | GJM1555C1H360GB01# |  |
|        |               |         |       | ±5%     | GJM1555C1H360JB01# |  |
|        |               |         | 39pF  | ±1%     | GJM1555C1H390FB01# |  |
|        |               |         |       | ±2%     | GJM1555C1H390GB01# |  |
|        |               |         |       | ±5%     | GJM1555C1H390JB01# |  |
|        |               |         | 43pF  | ±1%     | GJM1555C1H430FB01# |  |
|        |               |         |       | ±2%     | GJM1555C1H430GB01# |  |

Part number # indicates the package specification code.

## GJM Series Temperature Compensating Type **High Q** Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |  |
|--------|---------------|---------|--------|---------|--------------------|--|
| 0.55mm | 50Vdc         | COG     | 43pF   | ±5%     | GJM1555C1H430JB01# |  |
|        |               |         |        | ±1%     | GJM1555C1H470FB01# |  |
|        |               |         |        | ±2%     | GJM1555C1H470GB01# |  |
|        |               |         |        | ±5%     | GJM1555C1H470JB01# |  |
|        |               | CK      | 0.10pF | ±0.05pF | GJM1554C1HR10WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1HR10BB01# |  |
|        |               |         | 0.20pF | ±0.05pF | GJM1554C1HR20WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1HR20BB01# |  |
|        |               |         | 0.30pF | ±0.05pF | GJM1554C1HR30WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1HR30BB01# |  |
|        |               |         | 0.40pF | ±0.05pF | GJM1554C1HR40WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1HR40BB01# |  |
|        |               |         | 0.50pF | ±0.05pF | GJM1554C1HR50WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1HR50BB01# |  |
|        |               |         | 0.60pF | ±0.05pF | GJM1554C1HR60WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1HR60BB01# |  |
|        |               |         | 0.70pF | ±0.05pF | GJM1554C1HR70WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1HR70BB01# |  |
|        |               |         | 0.80pF | ±0.05pF | GJM1554C1HR80WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1HR80BB01# |  |
|        |               |         | 0.90pF | ±0.05pF | GJM1554C1HR90WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1HR90BB01# |  |
|        |               |         | 1.0pF  | ±0.05pF | GJM1554C1H1R0WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1H1R0BB01# |  |
|        |               |         |        | ±0.25pF | GJM1554C1H1R0CB01# |  |
|        |               |         | 1.1pF  | ±0.05pF | GJM1554C1H1R1WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1H1R1BB01# |  |
|        |               |         |        | ±0.25pF | GJM1554C1H1R1CB01# |  |
|        |               |         | 1.2pF  | ±0.05pF | GJM1554C1H1R2WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1H1R2BB01# |  |
|        |               |         |        | ±0.25pF | GJM1554C1H1R2CB01# |  |
|        |               |         | 1.3pF  | ±0.05pF | GJM1554C1H1R3WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1H1R3BB01# |  |
|        |               |         |        | ±0.25pF | GJM1554C1H1R3CB01# |  |
|        |               |         | 1.4pF  | ±0.05pF | GJM1554C1H1R4WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1H1R4BB01# |  |
|        |               |         |        | ±0.25pF | GJM1554C1H1R4CB01# |  |
|        |               |         | 1.5pF  | ±0.05pF | GJM1554C1H1R5WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1H1R5BB01# |  |
|        |               |         |        | ±0.25pF | GJM1554C1H1R5CB01# |  |
|        |               |         | 1.6pF  | ±0.05pF | GJM1554C1H1R6WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1H1R6BB01# |  |
|        |               |         |        | ±0.25pF | GJM1554C1H1R6CB01# |  |
|        |               |         | 1.7pF  | ±0.05pF | GJM1554C1H1R7WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1H1R7BB01# |  |
|        |               |         |        | ±0.25pF | GJM1554C1H1R7CB01# |  |
|        |               |         | 1.8pF  | ±0.05pF | GJM1554C1H1R8WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1H1R8BB01# |  |
|        |               |         |        | ±0.25pF | GJM1554C1H1R8CB01# |  |
|        |               |         | 1.9pF  | ±0.05pF | GJM1554C1H1R9WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1H1R9BB01# |  |
|        |               |         |        | ±0.25pF | GJM1554C1H1R9CB01# |  |
|        |               |         | 2.0pF  | ±0.05pF | GJM1554C1H2R0WB01# |  |
|        |               |         |        | ±0.1pF  | GJM1554C1H2R0BB01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 50Vdc         | CK      | 2.0pF | ±0.25pF | GJM1554C1H2R0CB01# |  |
|        |               | CJ      | 2.1pF | ±0.05pF | GJM1553C1H2R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1553C1H2R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM1553C1H2R1CB01# |  |
|        |               |         | 2.2pF | ±0.05pF | GJM1553C1H2R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1553C1H2R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM1553C1H2R2CB01# |  |
|        |               |         | 2.3pF | ±0.05pF | GJM1553C1H2R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1553C1H2R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM1553C1H2R3CB01# |  |
|        |               |         | 2.4pF | ±0.05pF | GJM1553C1H2R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1553C1H2R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM1553C1H2R4CB01# |  |
|        |               |         | 2.5pF | ±0.05pF | GJM1553C1H2R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1553C1H2R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM1553C1H2R5CB01# |  |
|        |               |         | 2.6pF | ±0.05pF | GJM1553C1H2R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1553C1H2R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM1553C1H2R6CB01# |  |
|        |               |         | 2.7pF | ±0.05pF | GJM1553C1H2R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1553C1H2R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM1553C1H2R7CB01# |  |
|        |               |         | 2.8pF | ±0.05pF | GJM1553C1H2R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1553C1H2R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM1553C1H2R8CB01# |  |
|        |               |         | 2.9pF | ±0.05pF | GJM1553C1H2R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1553C1H2R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM1553C1H2R9CB01# |  |
|        |               |         | 3.0pF | ±0.05pF | GJM1553C1H3R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1553C1H3R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM1553C1H3R0CB01# |  |
|        |               |         | 3.1pF | ±0.05pF | GJM1553C1H3R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1553C1H3R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM1553C1H3R1CB01# |  |
|        |               |         | 3.2pF | ±0.05pF | GJM1553C1H3R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1553C1H3R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM1553C1H3R2CB01# |  |
|        |               |         | 3.3pF | ±0.05pF | GJM1553C1H3R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1553C1H3R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM1553C1H3R3CB01# |  |
|        |               |         | 3.4pF | ±0.05pF | GJM1553C1H3R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1553C1H3R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM1553C1H3R4CB01# |  |
|        |               |         | 3.5pF | ±0.05pF | GJM1553C1H3R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1553C1H3R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM1553C1H3R5CB01# |  |
|        |               |         | 3.6pF | ±0.05pF | GJM1553C1H3R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1553C1H3R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM1553C1H3R6CB01# |  |
|        |               |         | 3.7pF | ±0.05pF | GJM1553C1H3R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1553C1H3R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM1553C1H3R7CB01# |  |
|        |               |         | 3.8pF | ±0.05pF | GJM1553C1H3R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1553C1H3R8BB01# |  |

Part number # indicates the package specification code.

## GJM Series Temperature Compensating Type High Q Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 50Vdc         | CJ      | 3.8pF | ±0.25pF | GJM1553C1H3R8CB01# |  |
|        |               |         | 3.9pF | ±0.05pF | GJM1553C1H3R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1553C1H3R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM1553C1H3R9CB01# |  |
|        |               | CH      | 4.0pF | ±0.05pF | GJM1552C1H4R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H4R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H4R0CB01# |  |
|        |               |         | 4.1pF | ±0.05pF | GJM1552C1H4R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H4R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H4R1CB01# |  |
|        |               |         | 4.2pF | ±0.05pF | GJM1552C1H4R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H4R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H4R2CB01# |  |
|        |               |         | 4.3pF | ±0.05pF | GJM1552C1H4R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H4R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H4R3CB01# |  |
|        |               |         | 4.4pF | ±0.05pF | GJM1552C1H4R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H4R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H4R4CB01# |  |
|        |               |         | 4.5pF | ±0.05pF | GJM1552C1H4R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H4R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H4R5CB01# |  |
|        |               |         | 4.6pF | ±0.05pF | GJM1552C1H4R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H4R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H4R6CB01# |  |
|        |               |         | 4.7pF | ±0.05pF | GJM1552C1H4R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H4R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H4R7CB01# |  |
|        |               |         | 4.8pF | ±0.05pF | GJM1552C1H4R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H4R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H4R8CB01# |  |
|        |               |         | 4.9pF | ±0.05pF | GJM1552C1H4R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H4R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H4R9CB01# |  |
|        |               |         | 5.0pF | ±0.05pF | GJM1552C1H5R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H5R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H5R0CB01# |  |
|        |               |         | 5.1pF | ±0.05pF | GJM1552C1H5R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H5R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H5R1CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H5R1DB01# |  |
|        |               |         | 5.2pF | ±0.05pF | GJM1552C1H5R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H5R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H5R2CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H5R2DB01# |  |
|        |               |         | 5.3pF | ±0.05pF | GJM1552C1H5R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H5R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H5R3CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H5R3DB01# |  |
|        |               |         | 5.4pF | ±0.05pF | GJM1552C1H5R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H5R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H5R4CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H5R4DB01# |  |
|        |               |         | 5.5pF | ±0.05pF | GJM1552C1H5R5WB01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 50Vdc         | CH      | 5.5pF | ±0.1pF  | GJM1552C1H5R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H5R5CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H5R5DB01# |  |
|        |               |         | 5.6pF | ±0.05pF | GJM1552C1H5R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H5R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H5R6CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H5R6DB01# |  |
|        |               |         | 5.7pF | ±0.05pF | GJM1552C1H5R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H5R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H5R7CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H5R7DB01# |  |
|        |               |         | 5.8pF | ±0.05pF | GJM1552C1H5R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H5R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H5R8CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H5R8DB01# |  |
|        |               |         | 5.9pF | ±0.05pF | GJM1552C1H5R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H5R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H5R9CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H5R9DB01# |  |
|        |               |         | 6.0pF | ±0.05pF | GJM1552C1H6R0WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H6R0BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H6R0CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H6R0DB01# |  |
|        |               |         | 6.1pF | ±0.05pF | GJM1552C1H6R1WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H6R1BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H6R1CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H6R1DB01# |  |
|        |               |         | 6.2pF | ±0.05pF | GJM1552C1H6R2WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H6R2BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H6R2CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H6R2DB01# |  |
|        |               |         | 6.3pF | ±0.05pF | GJM1552C1H6R3WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H6R3BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H6R3CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H6R3DB01# |  |
|        |               |         | 6.4pF | ±0.05pF | GJM1552C1H6R4WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H6R4BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H6R4CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H6R4DB01# |  |
|        |               |         | 6.5pF | ±0.05pF | GJM1552C1H6R5WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H6R5BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H6R5CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H6R5DB01# |  |
|        |               |         | 6.6pF | ±0.05pF | GJM1552C1H6R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H6R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H6R6CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H6R6DB01# |  |
|        |               |         | 6.7pF | ±0.05pF | GJM1552C1H6R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H6R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H6R7CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H6R7DB01# |  |
|        |               |         | 6.8pF | ±0.05pF | GJM1552C1H6R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H6R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H6R8CB01# |  |

Part number # indicates the package specification code.

## GJM Series Temperature Compensating Type **High Q** Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |
|--------|---------------|---------|-------|---------|--------------------|
| 0.55mm | 50Vdc         | CH      | 6.8pF | ±0.5pF  | GJM1552C1H6R8DB01# |
|        |               |         |       | ±0.05pF | GJM1552C1H6R9WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H6R9BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H6R9CB01# |
|        |               |         | 6.9pF | ±0.5pF  | GJM1552C1H6R9DB01# |
|        |               |         |       | ±0.05pF | GJM1552C1H7R0WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H7R0BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H7R0CB01# |
|        |               |         | 7.0pF | ±0.5pF  | GJM1552C1H7R0DB01# |
|        |               |         |       | ±0.05pF | GJM1552C1H7R1WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H7R1BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H7R1CB01# |
|        |               |         | 7.1pF | ±0.5pF  | GJM1552C1H7R1DB01# |
|        |               |         |       | ±0.05pF | GJM1552C1H7R2WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H7R2BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H7R2CB01# |
|        |               |         | 7.2pF | ±0.5pF  | GJM1552C1H7R2DB01# |
|        |               |         |       | ±0.05pF | GJM1552C1H7R3WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H7R3BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H7R3CB01# |
|        |               |         | 7.3pF | ±0.5pF  | GJM1552C1H7R3DB01# |
|        |               |         |       | ±0.05pF | GJM1552C1H7R4WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H7R4BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H7R4CB01# |
|        |               |         | 7.4pF | ±0.5pF  | GJM1552C1H7R4DB01# |
|        |               |         |       | ±0.05pF | GJM1552C1H7R5WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H7R5BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H7R5CB01# |
|        |               |         | 7.5pF | ±0.5pF  | GJM1552C1H7R5DB01# |
|        |               |         |       | ±0.05pF | GJM1552C1H7R6WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H7R6BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H7R6CB01# |
|        |               |         | 7.6pF | ±0.5pF  | GJM1552C1H7R6DB01# |
|        |               |         |       | ±0.05pF | GJM1552C1H7R7WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H7R7BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H7R7CB01# |
|        |               |         | 7.7pF | ±0.5pF  | GJM1552C1H7R7DB01# |
|        |               |         |       | ±0.05pF | GJM1552C1H7R8WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H7R8BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H7R8CB01# |
|        |               |         | 7.8pF | ±0.5pF  | GJM1552C1H7R8DB01# |
|        |               |         |       | ±0.05pF | GJM1552C1H7R9WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H7R9BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H7R9CB01# |
|        |               |         | 7.9pF | ±0.5pF  | GJM1552C1H7R9DB01# |
|        |               |         |       | ±0.05pF | GJM1552C1H8R0WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H8R0BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H8R0CB01# |
|        |               |         | 8.0pF | ±0.5pF  | GJM1552C1H8R0DB01# |
|        |               |         |       | ±0.05pF | GJM1552C1H8R1WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H8R1BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H8R1CB01# |
|        |               |         | 8.1pF | ±0.5pF  | GJM1552C1H8R1DB01# |
|        |               |         |       | ±0.05pF | GJM1552C1H8R2WB01# |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |
|--------|---------------|---------|-------|---------|--------------------|
| 0.55mm | 50Vdc         | CH      | 8.2pF | ±0.1pF  | GJM1552C1H8R2BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H8R2CB01# |
|        |               |         |       | ±0.5pF  | GJM1552C1H8R2DB01# |
|        |               |         | 8.3pF | ±0.05pF | GJM1552C1H8R3WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H8R3BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H8R3CB01# |
|        |               |         |       | ±0.5pF  | GJM1552C1H8R3DB01# |
|        |               |         | 8.4pF | ±0.05pF | GJM1552C1H8R4WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H8R4BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H8R4CB01# |
|        |               |         |       | ±0.5pF  | GJM1552C1H8R4DB01# |
|        |               |         | 8.5pF | ±0.05pF | GJM1552C1H8R5WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H8R5BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H8R5CB01# |
|        |               |         |       | ±0.5pF  | GJM1552C1H8R5DB01# |
|        |               |         | 8.6pF | ±0.05pF | GJM1552C1H8R6WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H8R6BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H8R6CB01# |
|        |               |         |       | ±0.5pF  | GJM1552C1H8R6DB01# |
|        |               |         | 8.7pF | ±0.05pF | GJM1552C1H8R7WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H8R7BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H8R7CB01# |
|        |               |         |       | ±0.5pF  | GJM1552C1H8R7DB01# |
|        |               |         | 8.8pF | ±0.05pF | GJM1552C1H8R8WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H8R8BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H8R8CB01# |
|        |               |         |       | ±0.5pF  | GJM1552C1H8R8DB01# |
|        |               |         | 8.9pF | ±0.05pF | GJM1552C1H8R9WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H8R9BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H8R9CB01# |
|        |               |         |       | ±0.5pF  | GJM1552C1H8R9DB01# |
|        |               |         | 9.0pF | ±0.05pF | GJM1552C1H9R0WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H9R0BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H9R0CB01# |
|        |               |         |       | ±0.5pF  | GJM1552C1H9R0DB01# |
|        |               |         | 9.1pF | ±0.05pF | GJM1552C1H9R1WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H9R1BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H9R1CB01# |
|        |               |         |       | ±0.5pF  | GJM1552C1H9R1DB01# |
|        |               |         | 9.2pF | ±0.05pF | GJM1552C1H9R2WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H9R2BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H9R2CB01# |
|        |               |         |       | ±0.5pF  | GJM1552C1H9R2DB01# |
|        |               |         | 9.3pF | ±0.05pF | GJM1552C1H9R3WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H9R3BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H9R3CB01# |
|        |               |         |       | ±0.5pF  | GJM1552C1H9R3DB01# |
|        |               |         | 9.4pF | ±0.05pF | GJM1552C1H9R4WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H9R4BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H9R4CB01# |
|        |               |         |       | ±0.5pF  | GJM1552C1H9R4DB01# |
|        |               |         | 9.5pF | ±0.05pF | GJM1552C1H9R5WB01# |
|        |               |         |       | ±0.1pF  | GJM1552C1H9R5BB01# |
|        |               |         |       | ±0.25pF | GJM1552C1H9R5CB01# |

Part number # indicates the package specification code.

## GJM Series Temperature Compensating Type High Q Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.55mm | 50Vdc         | CH      | 9.5pF | ±0.5pF  | GJM1552C1H9R5DB01# |  |
|        |               |         |       | ±0.05pF | GJM1552C1H9R6WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H9R6BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H9R6CB01# |  |
|        |               |         | 9.6pF | ±0.5pF  | GJM1552C1H9R6DB01# |  |
|        |               |         |       | ±0.05pF | GJM1552C1H9R7WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H9R7BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H9R7CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H9R7DB01# |  |
|        |               |         | 9.7pF | ±0.05pF | GJM1552C1H9R8WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H9R8BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H9R8CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H9R8DB01# |  |
|        |               |         | 9.8pF | ±0.05pF | GJM1552C1H9R9WB01# |  |
|        |               |         |       | ±0.1pF  | GJM1552C1H9R9BB01# |  |
|        |               |         |       | ±0.25pF | GJM1552C1H9R9CB01# |  |
|        |               |         |       | ±0.5pF  | GJM1552C1H9R9DB01# |  |
|        |               |         | 9.9pF | ±0.05pF | GJM1552C1H100GB01# |  |
|        |               |         |       | ±2%     | GJM1552C1H100JB01# |  |
|        |               |         |       | ±5%     | GJM1552C1H110GB01# |  |
|        |               |         |       | ±5%     | GJM1552C1H110JB01# |  |
|        |               |         | 10pF  | ±2%     | GJM1552C1H120GB01# |  |
|        |               |         |       | ±5%     | GJM1552C1H120JB01# |  |
|        |               |         | 11pF  | ±2%     | GJM1552C1H130GB01# |  |
|        |               |         |       | ±5%     | GJM1552C1H130JB01# |  |
|        |               |         | 12pF  | ±2%     | GJM1552C1H150GB01# |  |
|        |               |         |       | ±5%     | GJM1552C1H150JB01# |  |
|        |               |         | 13pF  | ±2%     | GJM1552C1H160GB01# |  |
|        |               |         |       | ±5%     | GJM1552C1H160JB01# |  |
|        |               |         | 15pF  | ±2%     | GJM1552C1H180GB01# |  |
|        |               |         |       | ±5%     | GJM1552C1H180JB01# |  |
|        |               |         | 16pF  | ±2%     | GJM1552C1H200GB01# |  |
|        |               |         |       | ±5%     | GJM1552C1H200JB01# |  |
|        |               |         | 18pF  | ±1%     | GJM1552C1H220GB01# |  |
|        |               |         |       | ±2%     | GJM1552C1H220JB01# |  |
|        |               |         |       | ±5%     | GJM1552C1H240GB01# |  |
|        |               |         | 20pF  | ±1%     | GJM1552C1H240JB01# |  |
|        |               |         |       | ±2%     | GJM1552C1H270GB01# |  |
|        |               |         |       | ±5%     | GJM1552C1H270JB01# |  |
|        |               |         | 22pF  | ±1%     | GJM1552C1H300GB01# |  |
|        |               |         |       | ±2%     | GJM1552C1H300JB01# |  |
|        |               |         |       | ±5%     | GJM1552C1H330GB01# |  |
|        |               |         | 24pF  | ±1%     | GJM1552C1H330JB01# |  |
|        |               |         |       | ±2%     | GJM1552C1H360GB01# |  |
|        |               |         |       | ±5%     | GJM1552C1H360JB01# |  |
|        |               |         | 27pF  | ±1%     | GJM1552C1H390GB01# |  |
|        |               |         |       | ±2%     | GJM1552C1H390JB01# |  |
|        |               |         |       | ±5%     | GJM1552C1H390JB01# |  |
|        |               |         | 30pF  | ±1%     | GJM1552C1H390GB01# |  |
|        |               |         |       | ±2%     | GJM1552C1H390GB01# |  |
|        |               |         |       | ±5%     | GJM1552C1H390JB01# |  |
|        |               |         | 33pF  | ±1%     | GJM1552C1H390GB01# |  |
|        |               |         |       | ±2%     | GJM1552C1H390GB01# |  |
|        |               |         |       | ±5%     | GJM1552C1H390JB01# |  |
|        |               |         | 36pF  | ±1%     | GJM1552C1H390GB01# |  |
|        |               |         |       | ±2%     | GJM1552C1H390GB01# |  |
|        |               |         |       | ±5%     | GJM1552C1H390JB01# |  |
|        |               |         | 39pF  | ±1%     | GJM1552C1H390GB01# |  |
|        |               |         |       | ±2%     | GJM1552C1H390GB01# |  |
|        |               |         |       | ±5%     | GJM1552C1H390JB01# |  |

| T max. | Rated Voltage | TC Code | Cap. | Tol. | Part Number        |  |
|--------|---------------|---------|------|------|--------------------|--|
| 0.55mm | 50Vdc         | CH      | 43pF | ±1%  | GJM1552C1H430FB01# |  |
|        |               |         |      | ±2%  | GJM1552C1H430GB01# |  |
|        |               |         |      | ±5%  | GJM1552C1H430JB01# |  |
|        |               |         | 47pF | ±1%  | GJM1552C1H470FB01# |  |
|        |               |         |      | ±2%  | GJM1552C1H470GB01# |  |
|        |               |         |      | ±5%  | GJM1552C1H470JB01# |  |
|        |               |         |      |      |                    |  |
|        |               |         |      |      |                    |  |

Part number # indicates the package specification code.

## Wire bondable vertical electrode Monolithic Ceramic Capacitor

### GMA Series

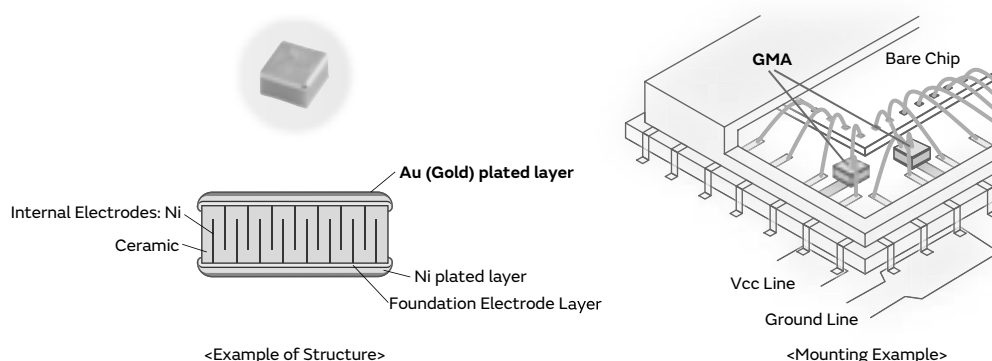


These capacitors are wire bondable for optical transceivers and IC packages, using Au (gold) terminations.

### Features

#### ① Allows for high density mounting.

Noise can be reduced by eliminating the routing of the wire, and high efficiency can be achieved with a built-in capacitor in a package, such as IC. Miniaturization of the set is also possible.



#### ② Achieved small size and high capacitance with a multilayer structure.

|                              |                                                             |
|------------------------------|-------------------------------------------------------------|
| Small size, high capacitance | Minimum 0.38mm×0.38mm<br>Achieved 0.1μF in 0.5mm×0.5mm size |
|------------------------------|-------------------------------------------------------------|

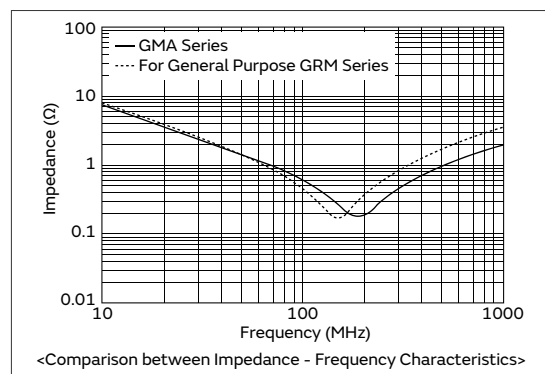
Lineup comparison table with competitor's is provided in my Murata Capacitor Site (need to sign in & approval from the site)

#### ③ Ideal for bypass applications

Especially for optical communication related devices such as TOSA/ROSA.

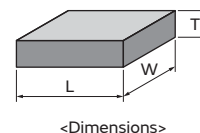
#### ④ Excellent in high frequency characteristics.

Since the capacitor consists of an upper/lower electrode structure, the current path becomes shorter and lowers the ESL. Compared with the general purpose GRM series of the same capacity, the impedance of this product becomes lower at high frequencies.



## Specifications

|                   |                                                                                                                                                                                                 |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Size (mm)         | 0.38×0.38mm to 0.8×0.8mm                                                                                                                                                                        |
| Rated Voltage     | 6.3Vdc to 100Vdc                                                                                                                                                                                |
| Capacitance       | 100pF to 0.47μF                                                                                                                                                                                 |
| Main Applications | 1. Optical communication related devices such as TOSA/ROSA.<br>2. Various device related, such as GaAsIC (mounted in IC packages)<br>3. Measuring instruments, other ultra compact/thin devices |



This catalog contains only a portion of the product lineup.  
 Please refer to the capacitor search tool on the Murata Web site for details.

GRM Series

GJM Series

GMA Series

GMD Series

GQM Series

GR3 Series

GRJ Series

LLA Series

LLL Series

LLM Series

LLR Series

KRM Series

KR3 Series

NFM Series

GCH Series

⚠Caution/  
Notice

## GMA Series High Dielectric Constant Type **Bonding** Part Number List

### 0.38×0.38mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 0.35mm | 10Vdc         | X7R     | 1000pF  | ±20% | GMA0D3R71A102MA01# |  |
|        |               |         | 1500pF  | ±20% | GMA0D3R71A152MA01# |  |
|        |               |         | 1800pF  | ±20% | GMA0D3R71A182MA01# |  |
|        |               |         | 10000pF | ±20% | GMA0D3R71A103MA01# |  |
|        |               | R       | 1000pF  | ±20% | GMA0D3R11A102MA01# |  |
|        |               |         | 1500pF  | ±20% | GMA0D3R11A152MA01# |  |
|        |               |         | 1800pF  | ±20% | GMA0D3R11A182MA01# |  |
|        |               |         | 10000pF | ±20% | GMA0D3R11A103MA01# |  |
|        |               | B       | 1000pF  | ±20% | GMA0D3B11A102MA01# |  |
|        |               |         | 1500pF  | ±20% | GMA0D3B11A152MA01# |  |
|        |               |         | 1800pF  | ±20% | GMA0D3B11A182MA01# |  |
|        |               |         | 1800pF  | ±20% | GMA0D3B11A182MA01# |  |

### 0.5×0.5mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 0.4mm  | 100Vdc        | X7R     | 100pF   | ±20% | GMA05XR72A101MA01# |  |
|        |               |         | 150pF   | ±20% | GMA05XR72A151MA01# |  |
|        |               |         | 220pF   | ±20% | GMA05XR72A221MA01# |  |
|        |               |         | 330pF   | ±20% | GMA05XR72A331MA01# |  |
|        |               |         | 470pF   | ±20% | GMA05XR72A471MA01# |  |
|        |               |         | 680pF   | ±20% | GMA05XR72A681MA01# |  |
|        |               |         | 1000pF  | ±20% | GMA05XR72A102MA01# |  |
|        |               | X7R     | 1500pF  | ±20% | GMA05XR71E152MA11# |  |
|        |               |         | 2200pF  | ±20% | GMA05XR71E222MA11# |  |
|        |               |         | 3300pF  | ±20% | GMA05XR71E332MA11# |  |
|        |               |         | 4700pF  | ±20% | GMA05XR71E472MA11# |  |
|        |               | B       | 1500pF  | ±20% | GMA05XB31E152MA11# |  |
|        |               |         | 2200pF  | ±20% | GMA05XB31E222MA11# |  |
|        |               |         | 3300pF  | ±20% | GMA05XB31E332MA11# |  |
|        |               |         | 4700pF  | ±20% | GMA05XB31E472MA11# |  |
|        | 25Vdc         | X7R     | 1500pF  | ±20% | GMA05XR71E152MA11# |  |
|        |               |         | 2200pF  | ±20% | GMA05XR71E222MA11# |  |
|        |               |         | 3300pF  | ±20% | GMA05XR71E332MA11# |  |
|        |               |         | 4700pF  | ±20% | GMA05XR71E472MA11# |  |
|        |               | B       | 1500pF  | ±20% | GMA05XB31E152MA11# |  |
|        |               |         | 2200pF  | ±20% | GMA05XB31E222MA11# |  |
|        |               |         | 3300pF  | ±20% | GMA05XB31E332MA11# |  |
|        |               |         | 4700pF  | ±20% | GMA05XB31E472MA11# |  |
|        |               | X7R     | 6800pF  | ±20% | GMA05XR71A682MA01# |  |
|        |               |         | 10000pF | ±20% | GMA05XR71A103MA01# |  |
|        |               |         | 15000pF | ±20% | GMA05XR71A153MA01# |  |
|        |               |         | 22000pF | ±20% | GMA05XR71A223MA01# |  |
|        |               | R       | 6800pF  | ±20% | GMA05XR11A682MA01# |  |
|        |               |         | 10000pF | ±20% | GMA05XR11A103MA01# |  |
|        |               |         | 15000pF | ±20% | GMA05XR11A153MA01# |  |
|        |               |         | 22000pF | ±20% | GMA05XR11A223MA01# |  |
|        |               | B       | 6800pF  | ±20% | GMA05XB11A682MA01# |  |
|        |               |         | 10000pF | ±20% | GMA05XB11A103MA01# |  |
|        |               |         | 15000pF | ±20% | GMA05XB11A153MA01# |  |
|        |               |         | 22000pF | ±20% | GMA05XB11A223MA01# |  |
|        | 6.3Vdc        | X5R     | 0.10μF  | ±20% | GMA05XR60J104ME12# |  |
|        |               | B       | 0.10μF  | ±20% | GMA05XB30J104ME12# |  |

### 0.8×0.8mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |  |
|--------|---------------|---------|--------|------|--------------------|--|
| 0.6mm  | 100Vdc        | X7R     | 1500pF | ±20% | GMA085R72A152MA01# |  |
|        |               |         | 2200pF | ±20% | GMA085R72A222MA01# |  |

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 0.6mm  | 100Vdc        | X7R     | 3300pF  | ±20% | GMA085R72A332MA01# |  |
|        |               |         | 4700pF  | ±20% | GMA085R72A472MA01# |  |
|        |               |         | 6800pF  | ±20% | GMA085R72A682MA01# |  |
|        | 25Vdc         | X7R     | 10000pF | ±20% | GMA085R71E103MA11# |  |
|        |               |         | 15000pF | ±20% | GMA085R71E153MA11# |  |
|        |               |         | 22000pF | ±20% | GMA085R71E223MA11# |  |
|        |               | B       | 10000pF | ±20% | GMA085B31E103MA11# |  |
|        |               |         | 15000pF | ±20% | GMA085B31E153MA11# |  |
|        |               |         | 22000pF | ±20% | GMA085B31E223MA11# |  |
|        | 10Vdc         | X7R     | 33000pF | ±20% | GMA085R71A333MA01# |  |
|        |               |         | 47000pF | ±20% | GMA085R71A473MA01# |  |
|        |               |         | 68000pF | ±20% | GMA085R71A683MA01# |  |
|        |               |         | 0.10μF  | ±20% | GMA085R71A104MA01# |  |
|        |               |         | 0.10μF  | ±20% | GMA085R71A104MA01# |  |
|        |               | R       | 33000pF | ±20% | GMA085R11A333MA01# |  |
|        |               |         | 47000pF | ±20% | GMA085R11A473MA01# |  |
|        |               |         | 68000pF | ±20% | GMA085R11A683MA01# |  |
|        |               |         | 0.10μF  | ±20% | GMA085R11A104MA01# |  |
|        |               |         | 0.10μF  | ±20% | GMA085R11A104MA01# |  |
|        |               | B       | 33000pF | ±20% | GMA085B11A333MA01# |  |
|        |               |         | 47000pF | ±20% | GMA085B11A473MA01# |  |
|        |               |         | 68000pF | ±20% | GMA085B11A683MA01# |  |
|        |               |         | 0.10μF  | ±20% | GMA085B11A104MA01# |  |
|        |               |         | 0.10μF  | ±20% | GMA085B11A104MA01# |  |
|        | 6.3Vdc        | X5R     | 0.47μF  | ±20% | GMA085R60J474ME12# |  |
|        |               | B       | 0.47μF  | ±20% | GMA085B30J474ME12# |  |

## Wire bondable/AuSn solderable Monolithic Ceramic Capacitor

# GMD Series

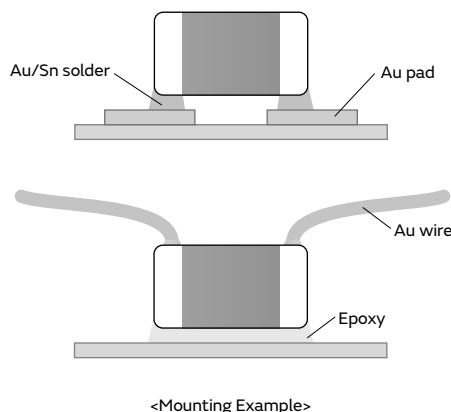
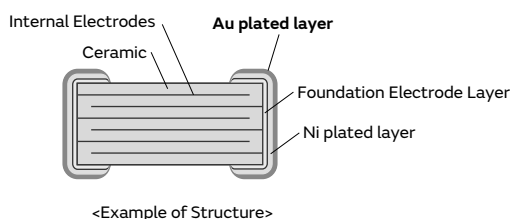


**This capacitor is compatible to wire bonding mounting by the external electrodes of Au plating.**

## Features

### ① Can be mounted by wire bonding and AuSn soldering.

Since the external electrodes are based on the Au plating specification, mounting by wire/die bonding is possible.



### ② Ideal for mounting in packages, such as optical communication related devices, IC and etc.

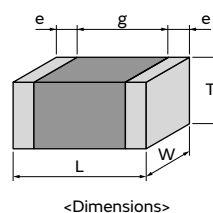
Noise can be reduced by eliminating the routing of the wire, and high efficiency can be achieved with a built-in capacitor in the package, such as TO-CAN, IC and etc. by wire bonding mounting.

### ③ Contributes to the miniaturization of the set.

Murata offers a lineup of small size products, such as the 0603 (0201) and 1005 (0402) in mm (inch).

## Specifications

|                   |                                                                 |
|-------------------|-----------------------------------------------------------------|
| Size (mm)         | 0.6×0.3mm to 1.0×0.5mm                                          |
| Rated Voltage     | 6.3Vdc to 50Vdc                                                 |
| Capacitance       | 100pF to 1.0μF                                                  |
| Main Applications | Various device related, such as GaAsIC (mounted in IC packages) |



This catalog contains only a portion of the product lineup.  
Please refer to the capacitor search tool on the Murata Web site for details.

# GMD Series High Dielectric Constant Type **Bonding** Part Number List

## 0.6×0.3mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |
|--------|---------------|---------|--------|------|--------------------|
| 0.33mm | 25Vdc         | X7R     | 100pF  | ±10% | GMD033R71E101KA01# |
|        |               |         | 120pF  | ±10% | GMD033R71E121KA01# |
|        |               |         | 150pF  | ±10% | GMD033R71E151KA01# |
|        |               |         | 180pF  | ±10% | GMD033R71E181KA01# |
|        |               |         | 220pF  | ±10% | GMD033R71E221KA01# |
|        |               |         | 270pF  | ±10% | GMD033R71E271KA01# |
|        |               |         | 330pF  | ±10% | GMD033R71E331KA01# |
|        |               |         | 390pF  | ±10% | GMD033R71E391KA01# |
|        |               |         | 470pF  | ±10% | GMD033R71E471KA01# |
|        |               |         | 560pF  | ±10% | GMD033R71E561KA01# |
|        |               |         | 680pF  | ±10% | GMD033R71E681KA01# |
|        |               |         | 820pF  | ±10% | GMD033R71E821KA01# |
|        |               |         | 1000pF | ±10% | GMD033R71E102KA01# |
|        |               |         | 1200pF | ±10% | GMD033R71E122KA01# |
|        |               |         | 1500pF | ±10% | GMD033R71E152KA01# |
|        |               | R       | 100pF  | ±10% | GMD033R11E101KA01# |
|        |               |         | 120pF  | ±10% | GMD033R11E121KA01# |
|        |               |         | 150pF  | ±10% | GMD033R11E151KA01# |
|        |               |         | 180pF  | ±10% | GMD033R11E181KA01# |
|        |               |         | 220pF  | ±10% | GMD033R11E221KA01# |
|        |               |         | 270pF  | ±10% | GMD033R11E271KA01# |
|        |               |         | 330pF  | ±10% | GMD033R11E331KA01# |
|        |               |         | 390pF  | ±10% | GMD033R11E391KA01# |
|        |               |         | 470pF  | ±10% | GMD033R11E471KA01# |
|        |               |         | 560pF  | ±10% | GMD033R11E561KA01# |
|        |               |         | 680pF  | ±10% | GMD033R11E681KA01# |
|        |               |         | 820pF  | ±10% | GMD033R11E821KA01# |
|        |               |         | 1000pF | ±10% | GMD033R11E102KA01# |
|        |               |         | 1200pF | ±10% | GMD033R11E122KA01# |
|        |               |         | 1500pF | ±10% | GMD033R11E152KA01# |
|        |               | B       | 100pF  | ±10% | GMD033B11E101KA01# |
|        |               |         | 120pF  | ±10% | GMD033B11E121KA01# |
|        |               |         | 150pF  | ±10% | GMD033B11E151KA01# |
|        |               |         | 180pF  | ±10% | GMD033B11E181KA01# |
|        |               |         | 220pF  | ±10% | GMD033B11E221KA01# |
|        |               |         | 270pF  | ±10% | GMD033B11E271KA01# |
|        |               |         | 330pF  | ±10% | GMD033B11E331KA01# |
|        |               |         | 390pF  | ±10% | GMD033B11E391KA01# |
|        |               |         | 470pF  | ±10% | GMD033B11E471KA01# |
|        |               |         | 560pF  | ±10% | GMD033B11E561KA01# |
|        |               |         | 680pF  | ±10% | GMD033B11E681KA01# |
|        |               |         | 820pF  | ±10% | GMD033B11E821KA01# |
|        |               |         | 1000pF | ±10% | GMD033B11E102KA01# |
|        |               |         | 1200pF | ±10% | GMD033B11E122KA01# |
|        |               |         | 1500pF | ±10% | GMD033B11E152KA01# |
|        | 16Vdc         | X7R     | 1800pF | ±10% | GMD033R71C182KA11# |
|        |               |         | 2200pF | ±10% | GMD033R71C222KA11# |
|        |               |         | 2700pF | ±10% | GMD033R71C272KA11# |
|        |               |         | 3300pF | ±10% | GMD033R71C332KA11# |
|        |               | R       | 1800pF | ±10% | GMD033R11C182KA11# |
|        |               |         | 2200pF | ±10% | GMD033R11C222KA11# |
|        |               |         | 2700pF | ±10% | GMD033R11C272KA11# |
|        |               |         | 3300pF | ±10% | GMD033R11C332KA11# |
|        |               |         | 1800pF | ±10% | GMD033R11C182KA11# |
|        |               |         | 2200pF | ±10% | GMD033R11C222KA11# |
|        |               |         | 2700pF | ±10% | GMD033R11C272KA11# |

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |
|--------|---------------|---------|---------|------|--------------------|
| 0.33mm | 16Vdc         | R       | 3300pF  | ±10% | GMD033R11C332KA11# |
|        |               |         | 1800pF  | ±10% | GMD033B31C182KA11# |
|        |               |         | 2200pF  | ±10% | GMD033B31C222KA11# |
|        |               |         | 2700pF  | ±10% | GMD033B31C272KA11# |
|        |               | B       | 3300pF  | ±10% | GMD033B31C332KA11# |
|        |               |         | 3900pF  | ±10% | GMD033R71A392KA01# |
|        |               |         | 4700pF  | ±10% | GMD033R71A472KA01# |
|        |               |         | 5600pF  | ±10% | GMD033R71A562KA01# |
|        |               |         | 6800pF  | ±10% | GMD033R71A682KA01# |
|        |               |         | 8200pF  | ±10% | GMD033R71A822KA01# |
|        |               |         | 10000pF | ±10% | GMD033R71A103KA01# |
|        | 10Vdc         | X7R     | 3900pF  | ±10% | GMD033R71A392KA01# |
|        |               |         | 4700pF  | ±10% | GMD033R71A472KA01# |
|        |               |         | 5600pF  | ±10% | GMD033R71A562KA01# |
|        |               |         | 6800pF  | ±10% | GMD033R71A682KA01# |
|        |               |         | 8200pF  | ±10% | GMD033R71A822KA01# |
|        |               |         | 10000pF | ±10% | GMD033R71A103KA01# |
|        |               | R       | 3900pF  | ±10% | GMD033R11A392KA01# |
|        |               |         | 4700pF  | ±10% | GMD033R11A472KA01# |
|        |               |         | 5600pF  | ±10% | GMD033R11A562KA01# |
|        |               |         | 6800pF  | ±10% | GMD033R11A682KA01# |
|        |               |         | 8200pF  | ±10% | GMD033R11A822KA01# |
|        |               |         | 10000pF | ±10% | GMD033R11A103KA01# |
|        |               | B       | 3900pF  | ±10% | GMD033B11A392KA01# |
|        |               |         | 4700pF  | ±10% | GMD033B11A472KA01# |
|        |               |         | 5600pF  | ±10% | GMD033B11A562KA01# |
|        |               |         | 6800pF  | ±10% | GMD033B11A682KA01# |
|        |               |         | 8200pF  | ±10% | GMD033B11A822KA01# |
|        |               |         | 10000pF | ±10% | GMD033B11A103KA01# |
|        | 6.3Vdc        | X5R     | 56000pF | ±10% | GMD033R60J563KE11# |
|        |               |         | 68000pF | ±10% | GMD033R60J683KE11# |
|        |               |         | 82000pF | ±10% | GMD033R60J823KE11# |
|        |               |         | 0.10μF  | ±10% | GMD033R60J104KE11# |
|        |               | B       | 56000pF | ±10% | GMD033B30J563KE11# |
|        |               |         | 68000pF | ±10% | GMD033B30J683KE11# |
|        |               |         | 82000pF | ±10% | GMD033B30J823KE11# |
|        |               |         | 0.10μF  | ±10% | GMD033B30J104KE11# |
|        |               |         | 0.10μF  | ±10% | GMD033B30J104KE11# |

## 1.0×0.5mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |
|--------|---------------|---------|--------|------|--------------------|
| 0.55mm | 50Vdc         | X7R     | 220pF  | ±10% | GMD155R71H221KA01# |
|        |               |         | 270pF  | ±10% | GMD155R71H271KA01# |
|        |               |         | 330pF  | ±10% | GMD155R71H331KA01# |
|        |               |         | 390pF  | ±10% | GMD155R71H391KA01# |
|        |               |         | 470pF  | ±10% | GMD155R71H471KA01# |
|        |               |         | 560pF  | ±10% | GMD155R71H561KA01# |
|        |               |         | 680pF  | ±10% | GMD155R71H681KA01# |
|        |               |         | 820pF  | ±10% | GMD155R71H821KA01# |
|        |               |         | 1000pF | ±10% | GMD155R71H102KA01# |
|        |               |         | 1200pF | ±10% | GMD155R71H122KA01# |
|        |               |         | 1500pF | ±10% | GMD155R71H152KA01# |
|        |               |         | 1800pF | ±10% | GMD155R71H182KA01# |
|        |               |         | 2200pF | ±10% | GMD155R71H222KA01# |
|        |               |         | 2700pF | ±10% | GMD155R71H272KA01# |
|        |               |         | 3300pF | ±10% | GMD155R71H332KA01# |
|        |               |         | 3900pF | ±10% | GMD155R71H392KA01# |
|        |               |         | 4700pF | ±10% | GMD155R71H472KA01# |
|        |               | R       | 220pF  | ±10% | GMD155R11H221KA01# |

Part number # indicates the package specification code.

## GMD Series High Dielectric Constant Type Bonding Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 0.55mm | 50Vdc         | R       | 270pF   | ±10% | GMD155R11H271KA01# |  |
|        |               |         | 330pF   | ±10% | GMD155R11H331KA01# |  |
|        |               |         | 390pF   | ±10% | GMD155R11H391KA01# |  |
|        |               |         | 470pF   | ±10% | GMD155R11H471KA01# |  |
|        |               |         | 560pF   | ±10% | GMD155R11H561KA01# |  |
|        |               |         | 680pF   | ±10% | GMD155R11H681KA01# |  |
|        |               |         | 820pF   | ±10% | GMD155R11H821KA01# |  |
|        |               |         | 1000pF  | ±10% | GMD155R11H102KA01# |  |
|        |               |         | 1200pF  | ±10% | GMD155R11H122KA01# |  |
|        |               |         | 1500pF  | ±10% | GMD155R11H152KA01# |  |
|        |               |         | 1800pF  | ±10% | GMD155R11H182KA01# |  |
|        |               |         | 2200pF  | ±10% | GMD155R11H222KA01# |  |
|        |               |         | 2700pF  | ±10% | GMD155R11H272KA01# |  |
|        |               |         | 3300pF  | ±10% | GMD155R11H332KA01# |  |
|        |               |         | 3900pF  | ±10% | GMD155R11H392KA01# |  |
|        |               |         | 4700pF  | ±10% | GMD155R11H472KA01# |  |
|        |               | B       | 220pF   | ±10% | GMD155B11H221KA01# |  |
|        |               |         | 270pF   | ±10% | GMD155B11H271KA01# |  |
|        |               |         | 330pF   | ±10% | GMD155B11H331KA01# |  |
|        |               |         | 390pF   | ±10% | GMD155B11H391KA01# |  |
|        |               |         | 470pF   | ±10% | GMD155B11H471KA01# |  |
|        |               |         | 560pF   | ±10% | GMD155B11H561KA01# |  |
|        |               |         | 680pF   | ±10% | GMD155B11H681KA01# |  |
|        |               |         | 820pF   | ±10% | GMD155B11H821KA01# |  |
|        |               |         | 1000pF  | ±10% | GMD155B11H102KA01# |  |
|        |               |         | 1200pF  | ±10% | GMD155B11H122KA01# |  |
|        |               |         | 1500pF  | ±10% | GMD155B11H152KA01# |  |
|        |               |         | 1800pF  | ±10% | GMD155B11H182KA01# |  |
|        |               |         | 2200pF  | ±10% | GMD155B11H222KA01# |  |
|        |               |         | 2700pF  | ±10% | GMD155B11H272KA01# |  |
|        |               |         | 3300pF  | ±10% | GMD155B11H332KA01# |  |
|        |               |         | 3900pF  | ±10% | GMD155B11H392KA01# |  |
|        |               |         | 4700pF  | ±10% | GMD155B11H472KA01# |  |
|        | 25Vdc         | X7R     | 5600pF  | ±10% | GMD155R71E562KA01# |  |
|        |               |         | 6800pF  | ±10% | GMD155R71E682KA01# |  |
|        |               |         | 8200pF  | ±10% | GMD155R71E822KA01# |  |
|        |               |         | 10000pF | ±10% | GMD155R71E103KA01# |  |
|        |               |         | 12000pF | ±10% | GMD155R71E123KA01# |  |
|        |               |         | 15000pF | ±10% | GMD155R71E153KA01# |  |
|        |               |         | 18000pF | ±10% | GMD155R71E183KA01# |  |
|        |               |         | 22000pF | ±10% | GMD155R71E223KA01# |  |
|        |               |         | 27000pF | ±10% | GMD155R71E273KA11# |  |
|        |               |         | 33000pF | ±10% | GMD155R71E333KA11# |  |
|        |               |         | 39000pF | ±10% | GMD155R71E393KA11# |  |
|        |               |         | 47000pF | ±10% | GMD155R71E473KA11# |  |
|        |               | R       | 5600pF  | ±10% | GMD155R11E562KA01# |  |
|        |               |         | 6800pF  | ±10% | GMD155R11E682KA01# |  |
|        |               |         | 8200pF  | ±10% | GMD155R11E822KA01# |  |
|        |               |         | 10000pF | ±10% | GMD155R11E103KA01# |  |
|        |               |         | 12000pF | ±10% | GMD155R11E123KA01# |  |
|        |               |         | 15000pF | ±10% | GMD155R11E153KA01# |  |
|        |               |         | 18000pF | ±10% | GMD155R11E183KA01# |  |
|        |               |         | 22000pF | ±10% | GMD155R11E223KA01# |  |
|        |               |         | 27000pF | ±10% | GMD155R11E273KA11# |  |

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |    |
|--------|---------------|---------|---------|------|--------------------|----|
| 0.55mm | 25Vdc         | R       | 33000pF | ±10% | GMD155R11E333KA11# |    |
|        |               |         | 39000pF | ±10% | GMD155R11E393KA11# |    |
|        |               |         | 47000pF | ±10% | GMD155R11E473KA11# |    |
|        |               | B       | 5600pF  | ±10% | GMD155B11E562KA01# |    |
|        |               |         | 6800pF  | ±10% | GMD155B11E682KA01# |    |
|        |               |         | 8200pF  | ±10% | GMD155B11E822KA01# |    |
|        |               |         | 10000pF | ±10% | GMD155B11E103KA01# |    |
|        |               |         | 12000pF | ±10% | GMD155B11E123KA01# |    |
|        |               |         | 15000pF | ±10% | GMD155B11E153KA01# |    |
|        |               |         | 18000pF | ±10% | GMD155B11E183KA01# |    |
|        |               |         | 22000pF | ±10% | GMD155B11E223KA01# |    |
|        |               |         | 27000pF | ±10% | GMD155B31E273KA11# |    |
|        |               |         | 33000pF | ±10% | GMD155B31E333KA11# |    |
|        |               |         | 39000pF | ±10% | GMD155B31E393KA11# |    |
|        |               |         | 47000pF | ±10% | GMD155B31E473KA11# |    |
|        | 16Vdc         | X7R     | 56000pF | ±10% | GMD155R71C563KA11# |    |
|        |               |         | 68000pF | ±10% | GMD155R71C683KA11# |    |
|        |               |         | 82000pF | ±10% | GMD155R71C823KA11# |    |
|        |               |         | 0.10μF  | ±10% | GMD155R71C104KA11# |    |
|        |               | R       | 56000pF | ±10% | GMD155R11C563KA11# |    |
|        |               |         | 68000pF | ±10% | GMD155R11C683KA11# |    |
|        |               |         | 82000pF | ±10% | GMD155R11C823KA11# |    |
|        |               |         | 0.10μF  | ±10% | GMD155R11C104KA11# |    |
|        |               | B       | 56000pF | ±10% | GMD155B31C563KA11# |    |
|        |               |         | 68000pF | ±10% | GMD155B31C683KA11# |    |
|        |               |         | 82000pF | ±10% | GMD155B31C823KA11# |    |
|        |               |         | 0.10μF  | ±10% | GMD155B31C104KA11# |    |
|        | 10Vdc         | X5R     | 0.12μF  | ±10% | GMD155R61A124KE12# |    |
|        |               |         | 0.15μF  | ±10% | GMD155R61A154KE12# |    |
|        |               |         | 0.18μF  | ±10% | GMD155R61A184KE12# |    |
|        |               |         | 0.22μF  | ±10% | GMD155R61A224KE12# |    |
|        |               |         | 0.27μF  | ±10% | GMD155R61A274KE11# | D1 |
|        |               |         | 0.33μF  | ±10% | GMD155R61A334KE11# | D1 |
|        |               |         | 0.39μF  | ±10% | GMD155R61A394KE11# | D1 |
|        |               |         | 0.47μF  | ±10% | GMD155R61A474KE11# | D1 |
|        |               | B       | 0.12μF  | ±10% | GMD155B31A124KE12# |    |
|        |               |         | 0.15μF  | ±10% | GMD155B31A154KE12# |    |
|        |               |         | 0.18μF  | ±10% | GMD155B31A184KE12# |    |
|        |               |         | 0.22μF  | ±10% | GMD155B31A224KE12# |    |
|        |               |         | 0.27μF  | ±10% | GMD155B31A274KE11# | D1 |
|        |               |         | 0.33μF  | ±10% | GMD155B31A334KE11# | D1 |
|        |               |         | 0.39μF  | ±10% | GMD155B31A394KE11# | D1 |
|        |               |         | 0.47μF  | ±10% | GMD155B31A474KE11# | D1 |

Part number # indicates the package specification code.

High Q Monolithic Ceramic Capacitor for High frequency and High power

**GQM Series**



**High Q**

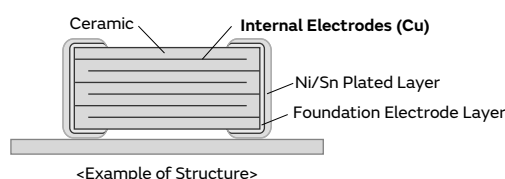
**WEB**

## High Frequency Capacitor Ideal for PA Design of Base Stations

### Features

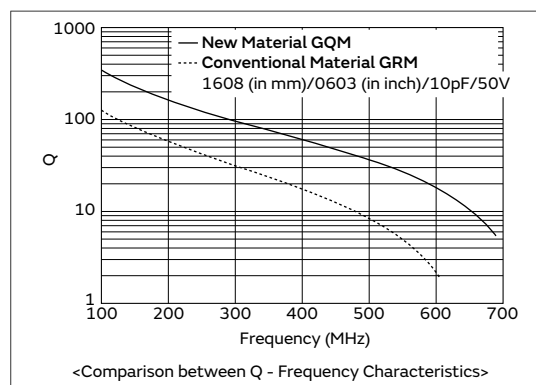
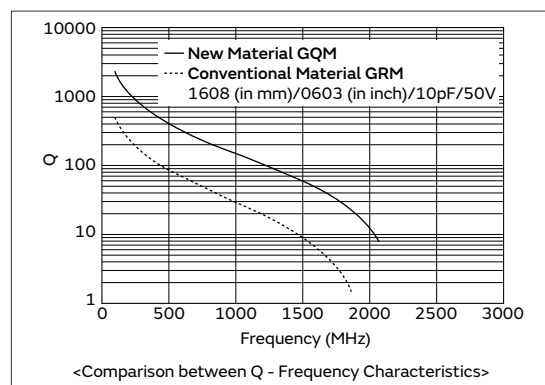
- 1 **Mainly ideal for base stations of mobile communication devices and temperature compensation of related modules.**

This product is ideal for temperature compensation of high frequency circuits, such as resonant circuits, tuning circuits, and impedance matching circuits where the operating characteristics of the device are greatly affected by the capacitance fluctuation.



- 2 **High Q and low ESR in VHF, UHF and microwave frequency bands.**

High Q and low ESR were achieved at a high frequency by adopting ceramic material as the dielectric material which enables an extremely low loss at high frequency, and base metal electrodes as the internal electrodes.



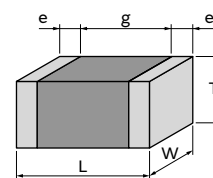
- 3 **Can be used for tight tolerance.**

In addition to standard tolerance, the allowable range of this product is also suitable for the following narrow tolerance.

| Capacitance Range | Standard Capacitance Tolerance<br>(Capacitance Tolerance Symbol) | Narrow Capacitance Tolerance<br>(Capacitance Tolerance Symbol) |
|-------------------|------------------------------------------------------------------|----------------------------------------------------------------|
| to 0.9pF          | ±0.1pF (B)                                                       | ±0.05pF (W)                                                    |
| 1.0 to 5.0pF      | ±0.25pF (C)                                                      | ±0.05pF (W), ±0.1pF (B)                                        |
| 5.1 to 9.9pF      | ±0.5pF (D)                                                       | ±0.05pF (W), ±0.1pF (B), ±0.25pF (C)                           |
| 10pF to           | ±5% (J)                                                          | ±2% (G)                                                        |

### Specifications

|                   |                                                         |
|-------------------|---------------------------------------------------------|
| Size (mm)         | 1.0×0.5mm to 2.8×2.8mm                                  |
| Rated Voltage     | 50Vdc to 500Vdc                                         |
| Capacitance       | 0.10pF to 200pF                                         |
| Main Applications | Measuring instruments, other ultra compact/thin devices |



<Dimensions>

This catalog contains only a portion of the product lineup.  
Please refer to the capacitor search tool on the Murata Web site for details.

## GQM Series Temperature Compensating Type High Q Part Number List

### 1.0×0.5mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |
|--------|---------------|---------|--------|---------|--------------------|
| 0.55mm | 200Vdc        | COG     | 0.10pF | ±0.1pF  | GQM1555C2DR10BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2DR10CB01# |
|        |               |         | 0.20pF | ±0.1pF  | GQM1555C2DR20BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2DR20CB01# |
|        |               |         | 0.30pF | ±0.1pF  | GQM1555C2DR30BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2DR30CB01# |
|        |               |         | 0.40pF | ±0.1pF  | GQM1555C2DR40BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2DR40CB01# |
|        |               |         | 0.50pF | ±0.1pF  | GQM1555C2DR50BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2DR50CB01# |
|        |               |         | 0.60pF | ±0.1pF  | GQM1555C2DR60BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2DR60CB01# |
|        |               |         | 0.70pF | ±0.1pF  | GQM1555C2DR70BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2DR70CB01# |
|        |               |         | 0.75pF | ±0.1pF  | GQM1555C2DR75BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2DR75CB01# |
|        |               |         | 0.80pF | ±0.1pF  | GQM1555C2DR80BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2DR80CB01# |
|        |               |         | 0.90pF | ±0.1pF  | GQM1555C2DR90BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2DR90CB01# |
|        |               |         | 1.0pF  | ±0.1pF  | GQM1555C2D1R0BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2D1R0CB01# |
|        |               |         | 1.1pF  | ±0.1pF  | GQM1555C2D1R1BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2D1R1CB01# |
|        |               |         | 1.2pF  | ±0.1pF  | GQM1555C2D1R2BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2D1R2CB01# |
|        |               |         | 1.3pF  | ±0.1pF  | GQM1555C2D1R3BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2D1R3CB01# |
|        |               |         | 1.5pF  | ±0.1pF  | GQM1555C2D1R5BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2D1R5CB01# |
|        |               |         | 1.6pF  | ±0.1pF  | GQM1555C2D1R6BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2D1R6CB01# |
|        |               |         | 1.8pF  | ±0.1pF  | GQM1555C2D1R8BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2D1R8CB01# |
|        |               |         | 2.0pF  | ±0.1pF  | GQM1555C2D2R0BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2D2R0CB01# |
|        |               |         | 2.2pF  | ±0.1pF  | GQM1555C2D2R2BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2D2R2CB01# |
|        |               |         | 2.4pF  | ±0.1pF  | GQM1555C2D2R4BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2D2R4CB01# |
|        |               |         | 2.7pF  | ±0.1pF  | GQM1555C2D2R7BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2D2R7CB01# |
|        |               |         | 3.0pF  | ±0.1pF  | GQM1555C2D3R0BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2D3R0CB01# |
|        |               |         | 3.3pF  | ±0.1pF  | GQM1555C2D3R3BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2D3R3CB01# |
|        |               |         | 3.6pF  | ±0.1pF  | GQM1555C2D3R6BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2D3R6CB01# |
|        |               |         | 3.9pF  | ±0.1pF  | GQM1555C2D3R9BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2D3R9CB01# |
|        |               |         | 4.0pF  | ±0.1pF  | GQM1555C2D4R0BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2D4R0CB01# |
|        |               |         | 4.3pF  | ±0.1pF  | GQM1555C2D4R3BB01# |
|        |               |         |        | ±0.25pF | GQM1555C2D4R3CB01# |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |
|--------|---------------|---------|-------|---------|--------------------|
| 0.55mm | 200Vdc        | COG     | 4.7pF | ±0.1pF  | GQM1555C2D4R7BB01# |
|        |               |         |       | ±0.25pF | GQM1555C2D4R7CB01# |
|        |               |         | 5.0pF | ±0.1pF  | GQM1555C2D5R0BB01# |
|        |               |         |       | ±0.25pF | GQM1555C2D5R0CB01# |
|        |               |         | 5.1pF | ±0.1pF  | GQM1555C2D5R1BB01# |
|        |               |         |       | ±0.25pF | GQM1555C2D5R1CB01# |
|        |               |         | 5.6pF | ±0.1pF  | GQM1555C2D5R6BB01# |
|        |               |         |       | ±0.25pF | GQM1555C2D5R6CB01# |
|        |               |         | 6.0pF | ±0.1pF  | GQM1555C2D6R0BB01# |
|        |               |         |       | ±0.25pF | GQM1555C2D6R0CB01# |
|        |               |         | 6.2pF | ±0.1pF  | GQM1555C2D6R2BB01# |
|        |               |         |       | ±0.25pF | GQM1555C2D6R2CB01# |
|        |               |         | 6.8pF | ±0.1pF  | GQM1555C2D6R8BB01# |
|        |               |         |       | ±0.25pF | GQM1555C2D6R8CB01# |
|        |               |         | 7.0pF | ±0.1pF  | GQM1555C2D7R0BB01# |
|        |               |         |       | ±0.25pF | GQM1555C2D7R0CB01# |
|        |               |         | 7.5pF | ±0.1pF  | GQM1555C2D7R5BB01# |
|        |               |         |       | ±0.25pF | GQM1555C2D7R5CB01# |
|        |               |         | 8.0pF | ±0.1pF  | GQM1555C2D8R0BB01# |
|        |               |         |       | ±0.25pF | GQM1555C2D8R0CB01# |
|        |               |         | 8.2pF | ±0.1pF  | GQM1555C2D8R2BB01# |
|        |               |         |       | ±0.25pF | GQM1555C2D8R2CB01# |
|        |               |         | 9.0pF | ±0.1pF  | GQM1555C2D9R0BB01# |
|        |               |         |       | ±0.25pF | GQM1555C2D9R0CB01# |
|        |               |         | 9.1pF | ±0.1pF  | GQM1555C2D9R1BB01# |
|        |               |         |       | ±0.25pF | GQM1555C2D9R1CB01# |
|        |               |         | 10pF  | ±2%     | GQM1555C2D100GB01# |
|        |               |         |       | ±5%     | GQM1555C2D100JB01# |
|        |               |         | 11pF  | ±2%     | GQM1555C2D110GB01# |
|        |               |         |       | ±5%     | GQM1555C2D110JB01# |
|        |               |         | 12pF  | ±2%     | GQM1555C2D120GB01# |
|        |               |         |       | ±5%     | GQM1555C2D120JB01# |
|        |               |         | 13pF  | ±2%     | GQM1555C2D130GB01# |
|        |               |         |       | ±5%     | GQM1555C2D130JB01# |
|        |               |         | 15pF  | ±2%     | GQM1555C2D150GB01# |
|        |               |         |       | ±5%     | GQM1555C2D150JB01# |
|        |               |         | 16pF  | ±2%     | GQM1555C2D160GB01# |
|        |               |         |       | ±5%     | GQM1555C2D160JB01# |
|        |               |         | 18pF  | ±2%     | GQM1555C2D180GB01# |
|        |               |         |       | ±5%     | GQM1555C2D180JB01# |
|        |               |         | 20pF  | ±2%     | GQM1555C2D200GB01# |
|        |               |         |       | ±5%     | GQM1555C2D200JB01# |
|        |               |         | 22pF  | ±2%     | GQM1555C2D220GB01# |
|        |               |         |       | ±5%     | GQM1555C2D220JB01# |
|        |               |         | 24pF  | ±2%     | GQM1555C2D240GB01# |
|        |               |         |       | ±5%     | GQM1555C2D240JB01# |
|        |               |         | 27pF  | ±2%     | GQM1555C2D270GB01# |
|        |               |         |       | ±5%     | GQM1555C2D270JB01# |
|        |               |         | 30pF  | ±2%     | GQM1555C2D300GB01# |
|        |               |         |       | ±5%     | GQM1555C2D300JB01# |
|        |               |         | 33pF  | ±2%     | GQM1555C2D330GB01# |
|        |               |         |       | ±5%     | GQM1555C2D330JB01# |
|        | 100Vdc        | COG     | 36pF  | ±2%     | GQM1555C2A360GB01# |
|        |               |         |       | ±5%     | GQM1555C2A360JB01# |

Part number # indicates the package specification code.

## GQM Series Temperature Compensating Type **High Q** Part Number List

(→ 1.0×0.5mm)

| T max. | Rated Voltage | TC Code | Cap. | Tol. | Part Number        |  |
|--------|---------------|---------|------|------|--------------------|--|
| 0.55mm | 100Vdc        | COG     | 39pF | ±2%  | GQM1555C2A390GB01# |  |
|        |               |         |      | ±5%  | GQM1555C2A390JB01# |  |
|        |               |         | 43pF | ±2%  | GQM1555C2A430GB01# |  |
|        |               |         |      | ±5%  | GQM1555C2A430JB01# |  |
|        |               |         | 47pF | ±2%  | GQM1555C2A470GB01# |  |
|        |               |         |      | ±5%  | GQM1555C2A470JB01# |  |

1.6×0.8mm

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.8mm  | 250Vdc        | COG     | 1.0pF | ±0.1pF  | GQM1875C2E1R0BB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E1R0CB12# |  |
|        |               |         | 1.1pF | ±0.1pF  | GQM1875C2E1R1BB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E1R1CB12# |  |
|        |               |         | 1.2pF | ±0.1pF  | GQM1875C2E1R2BB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E1R2CB12# |  |
|        |               |         | 1.3pF | ±0.1pF  | GQM1875C2E1R3BB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E1R3CB12# |  |
|        |               |         | 1.5pF | ±0.1pF  | GQM1875C2E1R5BB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E1R5CB12# |  |
|        |               |         | 1.6pF | ±0.1pF  | GQM1875C2E1R6BB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E1R6CB12# |  |
|        |               |         | 1.8pF | ±0.1pF  | GQM1875C2E1R8BB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E1R8CB12# |  |
|        |               |         | 2.0pF | ±0.1pF  | GQM1875C2E2R0BB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E2R0CB12# |  |
|        |               |         | 2.2pF | ±0.1pF  | GQM1875C2E2R2BB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E2R2CB12# |  |
|        |               |         | 2.4pF | ±0.1pF  | GQM1875C2E2R4BB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E2R4CB12# |  |
|        |               |         | 2.7pF | ±0.1pF  | GQM1875C2E2R7BB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E2R7CB12# |  |
|        |               |         | 3.0pF | ±0.1pF  | GQM1875C2E3R0BB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E3R0CB12# |  |
|        |               |         | 3.3pF | ±0.1pF  | GQM1875C2E3R3BB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E3R3CB12# |  |
|        |               |         | 3.6pF | ±0.1pF  | GQM1875C2E3R6BB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E3R6CB12# |  |
|        |               |         | 3.9pF | ±0.1pF  | GQM1875C2E3R9BB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E3R9CB12# |  |
|        |               |         | 4.0pF | ±0.1pF  | GQM1875C2E4R0BB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E4R0CB12# |  |
|        |               |         | 4.3pF | ±0.1pF  | GQM1875C2E4R3BB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E4R3CB12# |  |
|        |               |         | 4.7pF | ±0.1pF  | GQM1875C2E4R7BB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E4R7CB12# |  |
|        |               |         | 5.0pF | ±0.1pF  | GQM1875C2E5R0BB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E5R0CB12# |  |
|        |               |         | 5.1pF | ±0.25pF | GQM1875C2E5R1CB12# |  |
|        |               |         |       | ±0.5pF  | GQM1875C2E5R1DB12# |  |
|        |               |         | 5.6pF | ±0.25pF | GQM1875C2E5R6CB12# |  |
|        |               |         |       | ±0.5pF  | GQM1875C2E5R6DB12# |  |
|        |               |         | 6.0pF | ±0.25pF | GQM1875C2E6R0CB12# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.8mm  | 250Vdc        | COG     | 6.0pF | ±0.5pF  | GQM1875C2E6R0DB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E6R2CB12# |  |
|        |               |         | 6.2pF | ±0.5pF  | GQM1875C2E6R2DB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E6R8CB12# |  |
|        |               |         | 6.8pF | ±0.5pF  | GQM1875C2E6R8DB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E7R0CB12# |  |
|        |               |         | 7.0pF | ±0.5pF  | GQM1875C2E7R0DB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E7R5CB12# |  |
|        |               |         | 7.5pF | ±0.5pF  | GQM1875C2E7R5DB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E8R0CB12# |  |
|        |               |         | 8.0pF | ±0.5pF  | GQM1875C2E8R0DB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E8R2CB12# |  |
|        |               |         | 8.2pF | ±0.5pF  | GQM1875C2E8R2DB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E9R0CB12# |  |
|        |               |         | 9.0pF | ±0.5pF  | GQM1875C2E9R0DB12# |  |
|        |               |         |       | ±0.25pF | GQM1875C2E9R1CB12# |  |
|        |               |         | 9.1pF | ±0.5pF  | GQM1875C2E9R1DB12# |  |
|        |               |         |       | ±2%     | GQM1875C2E100GB12# |  |
|        |               |         | 10pF  | ±5%     | GQM1875C2E100JB12# |  |
|        |               |         |       | ±2%     | GQM1875C2E110GB12# |  |
|        |               |         | 11pF  | ±5%     | GQM1875C2E110JB12# |  |
|        |               |         |       | ±2%     | GQM1875C2E120GB12# |  |
|        |               |         | 12pF  | ±5%     | GQM1875C2E120JB12# |  |
|        |               |         |       | ±2%     | GQM1875C2E130GB12# |  |
|        |               |         | 13pF  | ±5%     | GQM1875C2E130JB12# |  |
|        |               |         |       | ±2%     | GQM1875C2E150GB12# |  |
|        |               |         | 15pF  | ±5%     | GQM1875C2E150JB12# |  |
|        |               |         |       | ±2%     | GQM1875C2E160GB12# |  |
|        |               |         | 16pF  | ±5%     | GQM1875C2E160JB12# |  |
|        |               |         |       | ±2%     | GQM1875C2E180GB12# |  |
|        |               |         | 18pF  | ±5%     | GQM1875C2E180JB12# |  |
|        |               |         |       | ±2%     | GQM1875C2E200GB12# |  |
|        |               |         | 20pF  | ±5%     | GQM1875C2E200JB12# |  |
|        |               |         |       | ±2%     | GQM1875C2E220GB12# |  |
|        |               |         | 22pF  | ±5%     | GQM1875C2E220JB12# |  |
|        |               |         |       | ±2%     | GQM1875C2E240GB12# |  |
|        |               |         | 24pF  | ±5%     | GQM1875C2E240JB12# |  |
|        |               |         |       | ±2%     | GQM1875C2E270GB12# |  |
|        |               |         | 27pF  | ±5%     | GQM1875C2E270JB12# |  |
|        |               |         |       | ±2%     | GQM1875C2E300GB12# |  |
|        |               |         | 30pF  | ±5%     | GQM1875C2E300JB12# |  |
|        |               |         |       | ±2%     | GQM1875C2E330GB12# |  |
|        |               |         | 33pF  | ±5%     | GQM1875C2E330JB12# |  |
|        |               |         |       | ±2%     | GQM1875C2E360GB12# |  |
|        |               |         | 36pF  | ±5%     | GQM1875C2E360JB12# |  |
|        |               |         |       | ±2%     | GQM1875C2E390GB12# |  |
|        |               |         | 39pF  | ±5%     | GQM1875C2E390JB12# |  |
|        |               |         |       | ±2%     | GQM1875C2E430GB12# |  |
|        |               |         | 43pF  | ±5%     | GQM1875C2E430JB12# |  |
|        |               |         |       | ±2%     | GQM1875C2E470GB12# |  |
|        |               |         | 47pF  | ±5%     | GQM1875C2E470JB12# |  |
|        |               |         |       | ±2%     | GQM1875C2E470GB12# |  |
| 0.9mm  | 100Vdc        | COG     | 1.0pF | ±0.1pF  | GQM1885C2A1R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM1885C2A1R0CB01# |  |
|        |               |         | 1.1pF | ±0.1pF  | GQM1885C2A1R1BB01# |  |

Part number # indicates the package specification code.

# GQM Series Temperature Compensating Type High Q Part Number List

(→ 1.6×0.8mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.9mm  | 100Vdc        | COG     | 1.1pF | ±0.25pF | GQM1885C2A1R1CB01# |  |
|        |               |         | 1.2pF | ±0.1pF  | GQM1885C2A1R2BB01# |  |
|        |               |         |       | ±0.25pF | GQM1885C2A1R2CB01# |  |
|        |               |         | 1.3pF | ±0.1pF  | GQM1885C2A1R3BB01# |  |
|        |               |         |       | ±0.25pF | GQM1885C2A1R3CB01# |  |
|        |               |         | 1.5pF | ±0.1pF  | GQM1885C2A1R5BB01# |  |
|        |               |         |       | ±0.25pF | GQM1885C2A1R5CB01# |  |
|        |               |         | 1.6pF | ±0.1pF  | GQM1885C2A1R6BB01# |  |
|        |               |         |       | ±0.25pF | GQM1885C2A1R6CB01# |  |
|        |               |         | 1.8pF | ±0.1pF  | GQM1885C2A1R8BB01# |  |
|        |               |         |       | ±0.25pF | GQM1885C2A1R8CB01# |  |
|        |               |         | 2.0pF | ±0.1pF  | GQM1885C2A2R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM1885C2A2R0CB01# |  |
|        |               |         | 2.2pF | ±0.1pF  | GQM1885C2A2R2BB01# |  |
|        |               |         |       | ±0.25pF | GQM1885C2A2R2CB01# |  |
|        |               |         | 2.4pF | ±0.1pF  | GQM1885C2A2R4BB01# |  |
|        |               |         |       | ±0.25pF | GQM1885C2A2R4CB01# |  |
|        |               |         | 2.7pF | ±0.1pF  | GQM1885C2A2R7BB01# |  |
|        |               |         |       | ±0.25pF | GQM1885C2A2R7CB01# |  |
|        |               |         | 3.0pF | ±0.1pF  | GQM1885C2A3R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM1885C2A3R0CB01# |  |
|        |               |         | 3.3pF | ±0.1pF  | GQM1885C2A3R3BB01# |  |
|        |               |         |       | ±0.25pF | GQM1885C2A3R3CB01# |  |
|        |               |         | 3.6pF | ±0.1pF  | GQM1885C2A3R6BB01# |  |
|        |               |         |       | ±0.25pF | GQM1885C2A3R6CB01# |  |
|        |               |         | 3.9pF | ±0.1pF  | GQM1885C2A3R9BB01# |  |
|        |               |         |       | ±0.25pF | GQM1885C2A3R9CB01# |  |
|        |               |         | 4.0pF | ±0.1pF  | GQM1885C2A4R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM1885C2A4R0CB01# |  |
|        |               |         | 4.3pF | ±0.1pF  | GQM1885C2A4R3BB01# |  |
|        |               |         |       | ±0.25pF | GQM1885C2A4R3CB01# |  |
|        |               |         | 4.7pF | ±0.1pF  | GQM1885C2A4R7BB01# |  |
|        |               |         |       | ±0.25pF | GQM1885C2A4R7CB01# |  |
|        |               |         | 5.0pF | ±0.1pF  | GQM1885C2A5R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM1885C2A5R0CB01# |  |
|        |               |         | 5.1pF | ±0.25pF | GQM1885C2A5R1CB01# |  |
|        |               |         |       | ±0.5pF  | GQM1885C2A5R1DB01# |  |
|        |               |         | 5.6pF | ±0.25pF | GQM1885C2A5R6CB01# |  |
|        |               |         |       | ±0.5pF  | GQM1885C2A5R6DB01# |  |
|        |               |         | 6.0pF | ±0.25pF | GQM1885C2A6R0CB01# |  |
|        |               |         |       | ±0.5pF  | GQM1885C2A6R0DB01# |  |
|        |               |         | 6.2pF | ±0.25pF | GQM1885C2A6R2CB01# |  |
|        |               |         |       | ±0.5pF  | GQM1885C2A6R2DB01# |  |
|        |               |         | 6.8pF | ±0.25pF | GQM1885C2A6R8CB01# |  |
|        |               |         |       | ±0.5pF  | GQM1885C2A6R8DB01# |  |
|        |               | CK      | 1.0pF | ±0.1pF  | GQM1884C2A1R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM1884C2A1R0CB01# |  |
|        |               |         | 1.1pF | ±0.1pF  | GQM1884C2A1R1BB01# |  |
|        |               |         |       | ±0.25pF | GQM1884C2A1R1CB01# |  |
|        |               |         | 1.2pF | ±0.1pF  | GQM1884C2A1R2BB01# |  |
|        |               |         |       | ±0.25pF | GQM1884C2A1R2CB01# |  |
|        |               |         | 1.3pF | ±0.1pF  | GQM1884C2A1R3BB01# |  |
|        |               |         |       | ±0.25pF | GQM1884C2A1R3CB01# |  |
|        |               |         | 1.5pF | ±0.1pF  | GQM1884C2A1R5BB01# |  |
|        |               |         |       |         |                    |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.9mm  | 100Vdc        | CK      | 1.5pF | ±0.25pF | GQM1884C2A1R5CB01# |  |
|        |               |         | 1.6pF | ±0.1pF  | GQM1884C2A1R6BB01# |  |
|        |               |         |       | ±0.25pF | GQM1884C2A1R6CB01# |  |
|        |               |         | 1.8pF | ±0.1pF  | GQM1884C2A1R8BB01# |  |
|        |               |         |       | ±0.25pF | GQM1884C2A1R8CB01# |  |
|        |               |         | 2.0pF | ±0.1pF  | GQM1884C2A2R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM1884C2A2R0CB01# |  |
|        |               | CJ      | 2.2pF | ±0.1pF  | GQM1883C2A2R2BB01# |  |
|        |               |         |       | ±0.25pF | GQM1883C2A2R2CB01# |  |
|        |               |         | 2.4pF | ±0.1pF  | GQM1883C2A2R4BB01# |  |
|        |               |         |       | ±0.25pF | GQM1883C2A2R4CB01# |  |
|        |               |         | 2.7pF | ±0.1pF  | GQM1883C2A2R7BB01# |  |
|        |               |         |       | ±0.25pF | GQM1883C2A2R7CB01# |  |
|        |               |         | 3.0pF | ±0.1pF  | GQM1883C2A3R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM1883C2A3R0CB01# |  |
|        |               |         | 3.3pF | ±0.1pF  | GQM1883C2A3R3BB01# |  |
|        |               |         |       | ±0.25pF | GQM1883C2A3R3CB01# |  |
|        |               |         | 3.6pF | ±0.1pF  | GQM1883C2A3R6BB01# |  |
|        |               |         |       | ±0.25pF | GQM1883C2A3R6CB01# |  |
|        |               |         | 3.9pF | ±0.1pF  | GQM1883C2A3R9BB01# |  |
|        |               |         |       | ±0.25pF | GQM1883C2A3R9CB01# |  |
|        |               | CH      | 4.0pF | ±0.1pF  | GQM1882C2A4R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM1882C2A4R0CB01# |  |
|        |               |         | 4.3pF | ±0.1pF  | GQM1882C2A4R3BB01# |  |
|        |               |         |       | ±0.25pF | GQM1882C2A4R3CB01# |  |
|        |               |         | 4.7pF | ±0.1pF  | GQM1882C2A4R7BB01# |  |
|        |               |         |       | ±0.25pF | GQM1882C2A4R7CB01# |  |
|        |               |         | 5.0pF | ±0.1pF  | GQM1882C2A5R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM1882C2A5R0CB01# |  |
|        |               |         | 5.1pF | ±0.25pF | GQM1882C2A5R1CB01# |  |
|        |               |         |       | ±0.5pF  | GQM1882C2A5R1DB01# |  |
|        |               |         | 5.6pF | ±0.25pF | GQM1882C2A5R6CB01# |  |
|        |               |         |       | ±0.5pF  | GQM1882C2A5R6DB01# |  |
|        |               |         | 6.0pF | ±0.25pF | GQM1882C2A6R0CB01# |  |
|        |               |         |       | ±0.5pF  | GQM1882C2A6R0DB01# |  |
|        |               |         | 6.2pF | ±0.25pF | GQM1882C2A6R2CB01# |  |
|        |               |         |       | ±0.5pF  | GQM1882C2A6R2DB01# |  |
|        |               |         | 6.8pF | ±0.25pF | GQM1882C2A6R8CB01# |  |
|        |               |         |       | ±0.5pF  | GQM1882C2A6R8DB01# |  |
|        | 50Vdc         | COG     | 7.0pF | ±0.25pF | GQM1885C1H7R0CB01# |  |
|        |               |         |       | ±0.5pF  | GQM1885C1H7R0DB01# |  |
|        |               |         | 7.5pF | ±0.25pF | GQM1885C1H7R5CB01# |  |
|        |               |         |       | ±0.5pF  | GQM1885C1H7R5DB01# |  |
|        |               |         | 8.0pF | ±0.25pF | GQM1885C1H8R0CB01# |  |
|        |               |         |       | ±0.5pF  | GQM1885C1H8R0DB01# |  |
|        |               |         | 8.2pF | ±0.25pF | GQM1885C1H8R2CB01# |  |
|        |               |         |       | ±0.5pF  | GQM1885C1H8R2DB01# |  |
|        |               |         | 9.0pF | ±0.25pF | GQM1885C1H9R0CB01# |  |
|        |               |         |       | ±0.5pF  | GQM1885C1H9R0DB01# |  |
|        |               |         | 9.1pF | ±0.25pF | GQM1885C1H9R1CB01# |  |
|        |               |         |       | ±0.5pF  | GQM1885C1H9R1DB01# |  |
|        |               |         | 10pF  | ±2%     | GQM1885C1H100GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H100JB01# |  |
|        |               |         | 11pF  | ±2%     | GQM1885C1H110GB01# |  |

Part number # indicates the package specification code.

# GQM Series Temperature Compensating Type **High Q** Part Number List

(→ 1.6×0.8mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 0.9mm  | 50Vdc         | COG     | 11pF  | ±5%     | GQM1885C1H110JB01# |  | 0.9mm  | 50Vdc         | CH      | 8.2pF | ±0.5pF  | GQM1882C1H8R2DB01# |  |
|        |               |         | 12pF  | ±2%     | GQM1885C1H120GB01# |  |        |               |         | 9.0pF | ±0.25pF | GQM1882C1H9R0CB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H120JB01# |  |        |               |         |       | ±0.5pF  | GQM1882C1H9R0DB01# |  |
|        |               |         | 13pF  | ±2%     | GQM1885C1H130GB01# |  |        |               |         | 9.1pF | ±0.25pF | GQM1882C1H9R1CB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H130JB01# |  |        |               |         |       | ±0.5pF  | GQM1882C1H9R1DB01# |  |
|        |               |         | 15pF  | ±2%     | GQM1885C1H150GB01# |  |        |               |         | 10pF  | ±2%     | GQM1882C1H100GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H150JB01# |  |        |               |         |       | ±5%     | GQM1882C1H100JB01# |  |
|        |               |         | 16pF  | ±2%     | GQM1885C1H160GB01# |  |        |               |         | 11pF  | ±2%     | GQM1882C1H110GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H160JB01# |  |        |               |         |       | ±5%     | GQM1882C1H110JB01# |  |
|        |               |         | 18pF  | ±2%     | GQM1885C1H180GB01# |  |        |               |         | 12pF  | ±2%     | GQM1882C1H120GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H180JB01# |  |        |               |         |       | ±5%     | GQM1882C1H120JB01# |  |
|        |               |         | 20pF  | ±2%     | GQM1885C1H200GB01# |  |        |               |         | 13pF  | ±2%     | GQM1882C1H130GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H200JB01# |  |        |               |         |       | ±5%     | GQM1882C1H130JB01# |  |
|        |               |         | 22pF  | ±2%     | GQM1885C1H220GB01# |  |        |               |         | 15pF  | ±2%     | GQM1882C1H150GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H220JB01# |  |        |               |         |       | ±5%     | GQM1882C1H150JB01# |  |
|        |               |         | 24pF  | ±2%     | GQM1885C1H240GB01# |  |        |               |         | 16pF  | ±2%     | GQM1882C1H160GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H240JB01# |  |        |               |         |       | ±5%     | GQM1882C1H160JB01# |  |
|        |               |         | 27pF  | ±2%     | GQM1885C1H270GB01# |  |        |               |         | 18pF  | ±2%     | GQM1882C1H180GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H270JB01# |  |        |               |         |       | ±5%     | GQM1882C1H180JB01# |  |
|        |               |         | 30pF  | ±2%     | GQM1885C1H300GB01# |  |        |               |         | 20pF  | ±2%     | GQM1882C1H200GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H300JB01# |  |        |               |         |       | ±5%     | GQM1882C1H200JB01# |  |
|        |               |         | 33pF  | ±2%     | GQM1885C1H330GB01# |  |        |               |         | 22pF  | ±2%     | GQM1882C1H220GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H330JB01# |  |        |               |         |       | ±5%     | GQM1882C1H220JB01# |  |
|        |               |         | 36pF  | ±2%     | GQM1885C1H360GB01# |  |        |               |         | 24pF  | ±2%     | GQM1882C1H240GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H360JB01# |  |        |               |         |       | ±5%     | GQM1882C1H240JB01# |  |
|        |               |         | 39pF  | ±2%     | GQM1885C1H390GB01# |  |        |               |         | 27pF  | ±2%     | GQM1882C1H270GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H390JB01# |  |        |               |         |       | ±5%     | GQM1882C1H270JB01# |  |
|        |               |         | 43pF  | ±2%     | GQM1885C1H430GB01# |  |        |               |         | 30pF  | ±2%     | GQM1882C1H300GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H430JB01# |  |        |               |         |       | ±5%     | GQM1882C1H300JB01# |  |
|        |               |         | 47pF  | ±2%     | GQM1885C1H470GB01# |  |        |               |         | 33pF  | ±2%     | GQM1882C1H330GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H470JB01# |  |        |               |         |       | ±5%     | GQM1882C1H330JB01# |  |
|        |               |         | 51pF  | ±2%     | GQM1885C1H510GB01# |  |        |               |         | 36pF  | ±2%     | GQM1882C1H360GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H510JB01# |  |        |               |         |       | ±5%     | GQM1882C1H360JB01# |  |
|        |               |         | 56pF  | ±2%     | GQM1885C1H560GB01# |  |        |               |         | 39pF  | ±2%     | GQM1882C1H390GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H560JB01# |  |        |               |         |       | ±5%     | GQM1882C1H390JB01# |  |
|        |               |         | 62pF  | ±2%     | GQM1885C1H620GB01# |  |        |               |         | 43pF  | ±2%     | GQM1882C1H430GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H620JB01# |  |        |               |         |       | ±5%     | GQM1882C1H430JB01# |  |
|        |               |         | 68pF  | ±2%     | GQM1885C1H680GB01# |  |        |               |         | 47pF  | ±2%     | GQM1882C1H470GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H680JB01# |  |        |               |         |       | ±5%     | GQM1882C1H470JB01# |  |
|        |               |         | 75pF  | ±2%     | GQM1885C1H750GB01# |  |        |               |         | 51pF  | ±2%     | GQM1882C1H510GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H750JB01# |  |        |               |         |       | ±5%     | GQM1882C1H510JB01# |  |
|        |               |         | 82pF  | ±2%     | GQM1885C1H820GB01# |  |        |               |         | 56pF  | ±2%     | GQM1882C1H560GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H820JB01# |  |        |               |         |       | ±5%     | GQM1882C1H560JB01# |  |
|        |               |         | 91pF  | ±2%     | GQM1885C1H910GB01# |  |        |               |         | 62pF  | ±2%     | GQM1882C1H620GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H910JB01# |  |        |               |         |       | ±5%     | GQM1882C1H620JB01# |  |
|        |               |         | 100pF | ±2%     | GQM1885C1H101GB01# |  |        |               |         | 68pF  | ±2%     | GQM1882C1H680GB01# |  |
|        |               |         |       | ±5%     | GQM1885C1H101JB01# |  |        |               |         |       | ±5%     | GQM1882C1H680JB01# |  |
|        |               | CH      | 7.0pF | ±0.25pF | GQM1882C1H7R0CB01# |  |        |               |         | 75pF  | ±2%     | GQM1882C1H750GB01# |  |
|        |               |         |       | ±0.5pF  | GQM1882C1H7R0DB01# |  |        |               |         |       | ±5%     | GQM1882C1H750JB01# |  |
|        |               |         | 7.5pF | ±0.25pF | GQM1882C1H7R5CB01# |  |        |               |         | 82pF  | ±2%     | GQM1882C1H820GB01# |  |
|        |               |         |       | ±0.5pF  | GQM1882C1H7R5DB01# |  |        |               |         |       | ±5%     | GQM1882C1H820JB01# |  |
|        |               |         | 8.0pF | ±0.25pF | GQM1882C1H8R0CB01# |  |        |               |         | 91pF  | ±2%     | GQM1882C1H910GB01# |  |
|        |               |         |       | ±0.5pF  | GQM1882C1H8R0DB01# |  |        |               |         |       | ±5%     | GQM1882C1H910JB01# |  |
|        |               |         | 8.2pF | ±0.25pF | GQM1882C1H8R2CB01# |  |        |               |         | 100pF | ±2%     | GQM1882C1H101GB01# |  |
|        |               |         |       | ±0.25pF | GQM1882C1H101GB01# |  |        |               |         |       | ±2%     | GQM1882C1H101GB01# |  |

Part number # indicates the package specification code.

# GQM Series Temperature Compensating Type High Q Part Number List

(→ 1.6×0.8mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol. | Part Number        |  |
|--------|---------------|---------|-------|------|--------------------|--|
| 0.9mm  | 50Vdc         | CH      | 100pF | ±5%  | GQM1882C1H101JB01# |  |

2.0×1.25mm

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.95mm | 100Vdc        | COG     | 1.0pF | ±0.1pF  | GQM2195C2A1R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM2195C2A1R0CB01# |  |
|        |               |         | 1.1pF | ±0.1pF  | GQM2195C2A1R1BB01# |  |
|        |               |         |       | ±0.25pF | GQM2195C2A1R1CB01# |  |
|        |               |         | 1.2pF | ±0.1pF  | GQM2195C2A1R2BB01# |  |
|        |               |         |       | ±0.25pF | GQM2195C2A1R2CB01# |  |
|        |               |         | 1.3pF | ±0.1pF  | GQM2195C2A1R3BB01# |  |
|        |               |         |       | ±0.25pF | GQM2195C2A1R3CB01# |  |
|        |               |         | 1.5pF | ±0.1pF  | GQM2195C2A1R5BB01# |  |
|        |               |         |       | ±0.25pF | GQM2195C2A1R5CB01# |  |
|        |               |         | 1.6pF | ±0.1pF  | GQM2195C2A1R6BB01# |  |
|        |               |         |       | ±0.25pF | GQM2195C2A1R6CB01# |  |
|        |               |         | 1.8pF | ±0.1pF  | GQM2195C2A1R8BB01# |  |
|        |               |         |       | ±0.25pF | GQM2195C2A1R8CB01# |  |
|        |               |         | 2.0pF | ±0.1pF  | GQM2195C2A2R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM2195C2A2R0CB01# |  |
|        |               |         | 2.2pF | ±0.1pF  | GQM2195C2A2R2BB01# |  |
|        |               |         |       | ±0.25pF | GQM2195C2A2R2CB01# |  |
|        |               |         | 2.4pF | ±0.1pF  | GQM2195C2A2R4BB01# |  |
|        |               |         |       | ±0.25pF | GQM2195C2A2R4CB01# |  |
|        |               |         | 2.7pF | ±0.1pF  | GQM2195C2A2R7BB01# |  |
|        |               |         |       | ±0.25pF | GQM2195C2A2R7CB01# |  |
|        |               |         | 3.0pF | ±0.1pF  | GQM2195C2A3R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM2195C2A3R0CB01# |  |
|        |               |         | 3.3pF | ±0.1pF  | GQM2195C2A3R3BB01# |  |
|        |               |         |       | ±0.25pF | GQM2195C2A3R3CB01# |  |
|        |               |         | 3.6pF | ±0.1pF  | GQM2195C2A3R6BB01# |  |
|        |               |         |       | ±0.25pF | GQM2195C2A3R6CB01# |  |
|        |               |         | 3.9pF | ±0.1pF  | GQM2195C2A3R9BB01# |  |
|        |               |         |       | ±0.25pF | GQM2195C2A3R9CB01# |  |
|        |               |         | 4.0pF | ±0.1pF  | GQM2195C2A4R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM2195C2A4R0CB01# |  |
|        |               |         | 4.3pF | ±0.1pF  | GQM2195C2A4R3BB01# |  |
|        |               |         |       | ±0.25pF | GQM2195C2A4R3CB01# |  |
|        |               |         | 4.7pF | ±0.1pF  | GQM2195C2A4R7BB01# |  |
|        |               |         |       | ±0.25pF | GQM2195C2A4R7CB01# |  |
|        |               |         | 5.0pF | ±0.1pF  | GQM2195C2A5R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM2195C2A5R0CB01# |  |
|        |               |         | 5.1pF | ±0.25pF | GQM2195C2A5R1CB01# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2A5R1DB01# |  |
|        |               |         | 5.6pF | ±0.25pF | GQM2195C2A5R6CB01# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2A5R6DB01# |  |
|        |               |         | 6.0pF | ±0.25pF | GQM2195C2A6R0CB01# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2A6R0DB01# |  |
|        |               |         | 6.2pF | ±0.25pF | GQM2195C2A6R2CB01# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2A6R2DB01# |  |
|        |               |         | 6.8pF | ±0.25pF | GQM2195C2A6R8CB01# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2A6R8DB01# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.95mm | 100Vdc        | COG     | 7.0pF | ±0.25pF | GQM2195C2A7R0CB01# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2A7R0DB01# |  |
|        |               |         | 7.5pF | ±0.25pF | GQM2195C2A7R5CB01# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2A7R5DB01# |  |
|        |               |         | 8.0pF | ±0.25pF | GQM2195C2A8R0CB01# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2A8R0DB01# |  |
|        |               |         | 8.2pF | ±0.25pF | GQM2195C2A8R2CB01# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2A8R2DB01# |  |
|        |               |         | 9.0pF | ±0.25pF | GQM2195C2A9R0CB01# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2A9R0DB01# |  |
|        |               |         | 9.1pF | ±0.25pF | GQM2195C2A9R1CB01# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2A9R1DB01# |  |
|        |               |         | 10pF  | ±2%     | GQM2195C2A100GB01# |  |
|        |               |         |       | ±5%     | GQM2195C2A100JB01# |  |
|        |               |         | 11pF  | ±2%     | GQM2195C2A110GB01# |  |
|        |               |         |       | ±5%     | GQM2195C2A110JB01# |  |
|        |               |         | 12pF  | ±2%     | GQM2195C2A120GB01# |  |
|        |               |         |       | ±5%     | GQM2195C2A120JB01# |  |
|        |               |         | 13pF  | ±2%     | GQM2195C2A130GB01# |  |
|        |               |         |       | ±5%     | GQM2195C2A130JB01# |  |
|        |               |         | 15pF  | ±2%     | GQM2195C2A150GB01# |  |
|        |               |         |       | ±5%     | GQM2195C2A150JB01# |  |
|        |               |         | 16pF  | ±2%     | GQM2195C2A160GB01# |  |
|        |               |         |       | ±5%     | GQM2195C2A160JB01# |  |
|        |               |         | 18pF  | ±2%     | GQM2195C2A180GB01# |  |
|        |               |         |       | ±5%     | GQM2195C2A180JB01# |  |
|        |               | CK      | 1.0pF | ±0.1pF  | GQM2194C2A1R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM2194C2A1R0CB01# |  |
|        |               |         | 1.1pF | ±0.1pF  | GQM2194C2A1R1BB01# |  |
|        |               |         |       | ±0.25pF | GQM2194C2A1R1CB01# |  |
|        |               |         | 1.2pF | ±0.1pF  | GQM2194C2A1R2BB01# |  |
|        |               |         |       | ±0.25pF | GQM2194C2A1R2CB01# |  |
|        |               |         | 1.3pF | ±0.1pF  | GQM2194C2A1R3BB01# |  |
|        |               |         |       | ±0.25pF | GQM2194C2A1R3CB01# |  |
|        |               |         | 1.5pF | ±0.1pF  | GQM2194C2A1R5BB01# |  |
|        |               |         |       | ±0.25pF | GQM2194C2A1R5CB01# |  |
|        |               |         | 1.6pF | ±0.1pF  | GQM2194C2A1R6BB01# |  |
|        |               |         |       | ±0.25pF | GQM2194C2A1R6CB01# |  |
|        |               |         | 1.8pF | ±0.1pF  | GQM2194C2A1R8BB01# |  |
|        |               |         |       | ±0.25pF | GQM2194C2A1R8CB01# |  |
|        |               |         | 2.0pF | ±0.1pF  | GQM2194C2A2R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM2194C2A2R0CB01# |  |
|        |               | CJ      | 2.2pF | ±0.1pF  | GQM2193C2A2R2BB01# |  |
|        |               |         |       | ±0.25pF | GQM2193C2A2R2CB01# |  |
|        |               |         | 2.4pF | ±0.1pF  | GQM2193C2A2R4BB01# |  |
|        |               |         |       | ±0.25pF | GQM2193C2A2R4CB01# |  |
|        |               |         | 2.7pF | ±0.1pF  | GQM2193C2A2R7BB01# |  |
|        |               |         |       | ±0.25pF | GQM2193C2A2R7CB01# |  |
|        |               |         | 3.0pF | ±0.1pF  | GQM2193C2A3R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM2193C2A3R0CB01# |  |
|        |               |         | 3.3pF | ±0.1pF  | GQM2193C2A3R3BB01# |  |
|        |               |         |       | ±0.25pF | GQM2193C2A3R3CB01# |  |
|        |               |         | 3.6pF | ±0.1pF  | GQM2193C2A3R6BB01# |  |
|        |               |         |       | ±0.25pF | GQM2193C2A3R6CB01# |  |

Part number # indicates the package specification code.

## GQM Series Temperature Compensating Type **High Q** Part Number List

(→ 2.0×1.25mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol. | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|-------|------|--------------------|--|
| 0.95mm | 100Vdc        | CJ      | 3.9pF | ±0.1pF  | GQM2193C2A3R9BB01# |  | 0.95mm | 50Vdc         | COG     | 30pF  | ±2%  | GQM2195C1H300GB01# |  |
|        |               |         |       | ±0.25pF | GQM2193C2A3R9CB01# |  |        |               |         |       | ±5%  | GQM2195C1H300JB01# |  |
|        |               | CH      | 4.0pF | ±0.1pF  | GQM2192C2A4R0BB01# |  |        |               |         | 33pF  | ±2%  | GQM2195C1H330GB01# |  |
|        |               |         |       | ±0.25pF | GQM2192C2A4R0CB01# |  |        |               |         |       | ±5%  | GQM2195C1H330JB01# |  |
|        |               |         | 4.3pF | ±0.1pF  | GQM2192C2A4R3BB01# |  |        |               |         | 36pF  | ±2%  | GQM2195C1H360GB01# |  |
|        |               |         |       | ±0.25pF | GQM2192C2A4R3CB01# |  |        |               |         |       | ±5%  | GQM2195C1H360JB01# |  |
|        |               |         | 4.7pF | ±0.1pF  | GQM2192C2A4R7BB01# |  |        |               |         | 39pF  | ±2%  | GQM2195C1H390GB01# |  |
|        |               |         |       | ±0.25pF | GQM2192C2A4R7CB01# |  |        |               |         |       | ±5%  | GQM2195C1H390JB01# |  |
|        |               |         | 5.0pF | ±0.1pF  | GQM2192C2A5R0BB01# |  |        |               |         | 43pF  | ±2%  | GQM2195C1H430GB01# |  |
|        |               |         |       | ±0.25pF | GQM2192C2A5R0CB01# |  |        |               |         |       | ±5%  | GQM2195C1H430JB01# |  |
|        |               |         | 5.1pF | ±0.25pF | GQM2192C2A5R1CB01# |  |        |               |         | 47pF  | ±2%  | GQM2195C1H470GB01# |  |
|        |               |         |       | ±0.5pF  | GQM2192C2A5R1DB01# |  |        |               |         |       | ±5%  | GQM2195C1H470JB01# |  |
|        |               |         | 5.6pF | ±0.25pF | GQM2192C2A5R6CB01# |  |        |               |         | 51pF  | ±2%  | GQM2195C1H510GB01# |  |
|        |               |         |       | ±0.5pF  | GQM2192C2A5R6DB01# |  |        |               |         |       | ±5%  | GQM2195C1H510JB01# |  |
|        |               |         | 6.0pF | ±0.25pF | GQM2192C2A6R0CB01# |  |        |               |         | 56pF  | ±2%  | GQM2195C1H560GB01# |  |
|        |               |         |       | ±0.5pF  | GQM2192C2A6R0DB01# |  |        |               |         |       | ±5%  | GQM2195C1H560JB01# |  |
|        |               |         | 6.2pF | ±0.25pF | GQM2192C2A6R2CB01# |  |        |               |         | 62pF  | ±2%  | GQM2195C1H620GB01# |  |
|        |               |         |       | ±0.5pF  | GQM2192C2A6R2DB01# |  |        |               |         |       | ±5%  | GQM2195C1H620JB01# |  |
|        |               |         | 6.8pF | ±0.25pF | GQM2192C2A6R8CB01# |  |        |               |         | 68pF  | ±2%  | GQM2195C1H680GB01# |  |
|        |               |         |       | ±0.5pF  | GQM2192C2A6R8DB01# |  |        |               |         |       | ±5%  | GQM2195C1H680JB01# |  |
|        |               |         | 7.0pF | ±0.25pF | GQM2192C2A7R0CB01# |  |        |               |         | 75pF  | ±2%  | GQM2195C1H750GB01# |  |
|        |               |         |       | ±0.5pF  | GQM2192C2A7R0DB01# |  |        |               |         |       | ±5%  | GQM2195C1H750JB01# |  |
|        |               |         | 7.5pF | ±0.25pF | GQM2192C2A7R5CB01# |  |        |               |         | 82pF  | ±2%  | GQM2195C1H820GB01# |  |
|        |               |         |       | ±0.5pF  | GQM2192C2A7R5DB01# |  |        |               |         |       | ±5%  | GQM2195C1H820JB01# |  |
|        |               |         | 8.0pF | ±0.25pF | GQM2192C2A8R0CB01# |  |        |               |         | 91pF  | ±2%  | GQM2195C1H910GB01# |  |
|        |               |         |       | ±0.5pF  | GQM2192C2A8R0DB01# |  |        |               |         |       | ±5%  | GQM2195C1H910JB01# |  |
|        |               |         | 8.2pF | ±0.25pF | GQM2192C2A8R2CB01# |  |        |               |         | 100pF | ±2%  | GQM2195C1H101GB01# |  |
|        |               |         |       | ±0.5pF  | GQM2192C2A8R2DB01# |  |        |               |         |       | ±5%  | GQM2195C1H101JB01# |  |
|        |               |         | 9.0pF | ±0.25pF | GQM2192C2A9R0CB01# |  |        |               | CH      | 20pF  | ±2%  | GQM2192C1H200GB01# |  |
|        |               |         |       | ±0.5pF  | GQM2192C2A9R0DB01# |  |        |               |         |       | ±5%  | GQM2192C1H200JB01# |  |
|        |               |         | 9.1pF | ±0.25pF | GQM2192C2A9R1CB01# |  |        |               |         | 22pF  | ±2%  | GQM2192C1H220GB01# |  |
|        |               |         |       | ±0.5pF  | GQM2192C2A9R1DB01# |  |        |               |         |       | ±5%  | GQM2192C1H220JB01# |  |
|        |               |         | 10pF  | ±2%     | GQM2192C2A100GB01# |  |        |               |         | 24pF  | ±2%  | GQM2192C1H240GB01# |  |
|        |               |         |       | ±5%     | GQM2192C2A100JB01# |  |        |               |         |       | ±5%  | GQM2192C1H240JB01# |  |
|        |               |         | 11pF  | ±2%     | GQM2192C2A110GB01# |  |        |               |         | 27pF  | ±2%  | GQM2192C1H270GB01# |  |
|        |               |         |       | ±5%     | GQM2192C2A110JB01# |  |        |               |         |       | ±5%  | GQM2192C1H270JB01# |  |
|        |               |         | 12pF  | ±2%     | GQM2192C2A120GB01# |  |        |               |         | 30pF  | ±2%  | GQM2192C1H300GB01# |  |
|        |               |         |       | ±5%     | GQM2192C2A120JB01# |  |        |               |         |       | ±5%  | GQM2192C1H300JB01# |  |
|        |               |         | 13pF  | ±2%     | GQM2192C2A130GB01# |  |        |               |         | 33pF  | ±2%  | GQM2192C1H330GB01# |  |
|        |               |         |       | ±5%     | GQM2192C2A130JB01# |  |        |               |         |       | ±5%  | GQM2192C1H330JB01# |  |
|        |               |         | 15pF  | ±2%     | GQM2192C2A150GB01# |  |        |               |         | 36pF  | ±2%  | GQM2192C1H360GB01# |  |
|        |               |         |       | ±5%     | GQM2192C2A150JB01# |  |        |               |         |       | ±5%  | GQM2192C1H360JB01# |  |
|        |               |         | 16pF  | ±2%     | GQM2192C2A160GB01# |  |        |               |         | 39pF  | ±2%  | GQM2192C1H390GB01# |  |
|        |               |         |       | ±5%     | GQM2192C2A160JB01# |  |        |               |         |       | ±5%  | GQM2192C1H390JB01# |  |
|        |               |         | 18pF  | ±2%     | GQM2192C2A180GB01# |  |        |               |         | 43pF  | ±2%  | GQM2192C1H430GB01# |  |
|        |               |         |       | ±5%     | GQM2192C2A180JB01# |  |        |               |         |       | ±5%  | GQM2192C1H430JB01# |  |
|        | 50Vdc         | COG     | 20pF  | ±2%     | GQM2195C1H200GB01# |  |        |               |         | 47pF  | ±2%  | GQM2192C1H470GB01# |  |
|        |               |         |       | ±5%     | GQM2195C1H200JB01# |  |        |               |         |       | ±5%  | GQM2192C1H470JB01# |  |
|        |               |         | 22pF  | ±2%     | GQM2195C1H220GB01# |  |        |               |         | 51pF  | ±2%  | GQM2192C1H510GB01# |  |
|        |               |         |       | ±5%     | GQM2195C1H220JB01# |  |        |               |         |       | ±5%  | GQM2192C1H510JB01# |  |
|        |               |         | 24pF  | ±2%     | GQM2195C1H240GB01# |  |        |               |         | 56pF  | ±2%  | GQM2192C1H560GB01# |  |
|        |               |         |       | ±5%     | GQM2195C1H240JB01# |  |        |               |         |       | ±5%  | GQM2192C1H560JB01# |  |
|        |               |         | 27pF  | ±2%     | GQM2195C1H270GB01# |  |        |               |         | 62pF  | ±2%  | GQM2192C1H620GB01# |  |
|        |               |         |       | ±5%     | GQM2195C1H270JB01# |  |        |               |         |       | ±5%  | GQM2192C1H620JB01# |  |

Part number # indicates the package specification code.

# GQM Series Temperature Compensating Type High Q Part Number List

(→ 2.0×1.25mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 0.95mm | 50Vdc         | CH      | 68pF  | ±2%     | GQM2192C1H680GB01# |  |
|        |               |         |       | ±5%     | GQM2192C1H680JB01# |  |
|        |               |         | 75pF  | ±2%     | GQM2192C1H750GB01# |  |
|        |               |         |       | ±5%     | GQM2192C1H750JB01# |  |
|        |               |         | 82pF  | ±2%     | GQM2192C1H820GB01# |  |
|        |               |         |       | ±5%     | GQM2192C1H820JB01# |  |
|        |               |         | 91pF  | ±2%     | GQM2192C1H910GB01# |  |
|        |               |         |       | ±5%     | GQM2192C1H910JB01# |  |
|        |               |         | 100pF | ±2%     | GQM2192C1H101GB01# |  |
|        |               |         |       | ±5%     | GQM2192C1H101JB01# |  |
| 1.0mm  | 500Vdc        | X8G     | 1.0pF | ±0.1pF  | GQM2195G2H1R0BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2H1R0CB12# |  |
|        |               |         | 1.1pF | ±0.1pF  | GQM2195G2H1R1BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2H1R1CB12# |  |
|        |               |         | 1.2pF | ±0.1pF  | GQM2195G2H1R2BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2H1R2CB12# |  |
|        |               |         | 1.3pF | ±0.1pF  | GQM2195G2H1R3BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2H1R3CB12# |  |
|        |               |         | 1.5pF | ±0.1pF  | GQM2195G2H1R5BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2H1R5CB12# |  |
|        |               |         | 1.6pF | ±0.1pF  | GQM2195G2H1R6BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2H1R6CB12# |  |
|        |               |         | 1.8pF | ±0.1pF  | GQM2195G2H1R8BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2H1R8CB12# |  |
|        |               |         | 2.0pF | ±0.1pF  | GQM2195G2H2R0BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2H2R0CB12# |  |
|        |               |         | 2.2pF | ±0.1pF  | GQM2195G2H2R2BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2H2R2CB12# |  |
|        |               |         | 2.4pF | ±0.1pF  | GQM2195G2H2R4BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2H2R4CB12# |  |
|        |               |         | 2.7pF | ±0.1pF  | GQM2195G2H2R7BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2H2R7CB12# |  |
|        |               |         | 3.0pF | ±0.1pF  | GQM2195G2H3R0BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2H3R0CB12# |  |
|        |               |         | 3.3pF | ±0.1pF  | GQM2195G2H3R3BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2H3R3CB12# |  |
|        |               |         | 3.6pF | ±0.1pF  | GQM2195G2H3R6BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2H3R6CB12# |  |
|        |               |         | 3.9pF | ±0.1pF  | GQM2195G2H3R9BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2H3R9CB12# |  |
|        |               |         | 4.0pF | ±0.1pF  | GQM2195G2H4R0BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2H4R0CB12# |  |
|        |               |         | 4.3pF | ±0.1pF  | GQM2195G2H4R3BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2H4R3CB12# |  |
|        |               |         | 4.7pF | ±0.1pF  | GQM2195G2H4R7BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2H4R7CB12# |  |
|        |               |         | 5.0pF | ±0.1pF  | GQM2195G2H5R0BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2H5R0CB12# |  |
|        |               |         | 5.1pF | ±0.25pF | GQM2195G2H5R1CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2H5R1DB12# |  |
|        |               |         | 5.6pF | ±0.25pF | GQM2195G2H5R6CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2H5R6DB12# |  |
|        |               |         | 6.0pF | ±0.25pF | GQM2195G2H6R0CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2H6R0DB12# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 1.0mm  | 500Vdc        | X8G     | 6.2pF | ±0.25pF | GQM2195G2H6R2CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2H6R2DB12# |  |
|        |               |         | 6.8pF | ±0.25pF | GQM2195G2H6R8CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2H6R8DB12# |  |
|        |               |         | 7.0pF | ±0.25pF | GQM2195G2H7R0CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2H7R0DB12# |  |
|        |               |         | 7.5pF | ±0.25pF | GQM2195G2H7R5CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2H7R5DB12# |  |
|        |               |         | 8.0pF | ±0.25pF | GQM2195G2H8R0CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2H8R0DB12# |  |
|        |               |         | 8.2pF | ±0.25pF | GQM2195G2H8R2CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2H8R2DB12# |  |
|        |               |         | 9.0pF | ±0.25pF | GQM2195G2H9R0CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2H9R0DB12# |  |
|        |               |         | 9.1pF | ±0.25pF | GQM2195G2H9R1CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2H9R1DB12# |  |
|        |               |         | 10pF  | ±2%     | GQM2195G2H100GB12# |  |
|        |               |         |       | ±5%     | GQM2195G2H100JB12# |  |
|        |               |         | 11pF  | ±2%     | GQM2195G2H110GB12# |  |
|        |               |         |       | ±5%     | GQM2195G2H110JB12# |  |
|        |               |         | 12pF  | ±2%     | GQM2195G2H120GB12# |  |
|        |               |         |       | ±5%     | GQM2195G2H120JB12# |  |
|        |               |         | 13pF  | ±2%     | GQM2195G2H130GB12# |  |
|        |               |         |       | ±5%     | GQM2195G2H130JB12# |  |
|        |               |         | 15pF  | ±2%     | GQM2195G2H150GB12# |  |
|        |               |         |       | ±5%     | GQM2195G2H150JB12# |  |
|        |               |         | 16pF  | ±2%     | GQM2195G2H160GB12# |  |
|        |               |         |       | ±5%     | GQM2195G2H160JB12# |  |
|        |               |         | 18pF  | ±2%     | GQM2195G2H180GB12# |  |
|        |               |         |       | ±5%     | GQM2195G2H180JB12# |  |
|        |               |         | 20pF  | ±2%     | GQM2195G2H200GB12# |  |
|        |               |         |       | ±5%     | GQM2195G2H200JB12# |  |
|        |               |         | 22pF  | ±2%     | GQM2195G2H220GB12# |  |
|        |               |         |       | ±5%     | GQM2195G2H220JB12# |  |
|        | 250Vdc        | COG     | 1.0pF | ±0.1pF  | GQM2195C2E1R0BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195C2E1R0CB12# |  |
|        |               |         | 1.1pF | ±0.1pF  | GQM2195C2E1R1BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195C2E1R1CB12# |  |
|        |               |         | 1.2pF | ±0.1pF  | GQM2195C2E1R2BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195C2E1R2CB12# |  |
|        |               |         | 1.3pF | ±0.1pF  | GQM2195C2E1R3BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195C2E1R3CB12# |  |
|        |               |         | 1.5pF | ±0.1pF  | GQM2195C2E1R5BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195C2E1R5CB12# |  |
|        |               |         | 1.6pF | ±0.1pF  | GQM2195C2E1R6BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195C2E1R6CB12# |  |
|        |               |         | 1.8pF | ±0.1pF  | GQM2195C2E1R8BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195C2E1R8CB12# |  |
|        |               |         | 2.0pF | ±0.1pF  | GQM2195C2E2R0BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195C2E2R0CB12# |  |
|        |               |         | 2.2pF | ±0.1pF  | GQM2195C2E2R2BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195C2E2R2CB12# |  |
|        |               |         | 2.4pF | ±0.1pF  | GQM2195C2E2R4BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195C2E2R4CB12# |  |

Part number # indicates the package specification code.

# GQM Series Temperature Compensating Type High Q Part Number List

(→ 2.0×1.25mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  | T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|--------|---------------|---------|-------|---------|--------------------|--|
| 1.0mm  | 250Vdc        | COG     | 2.7pF | ±0.1pF  | GQM2195C2E2R7BB12# |  | 1.0mm  | 250Vdc        | COG     | 20pF  | ±2%     | GQM2195C2E200GB12# |  |
|        |               |         |       | ±0.25pF | GQM2195C2E2R7CB12# |  |        |               |         |       | ±5%     | GQM2195C2E200JB12# |  |
|        |               |         | 3.0pF | ±0.1pF  | GQM2195C2E3R0BB12# |  |        |               |         | 22pF  | ±2%     | GQM2195C2E220GB12# |  |
|        |               |         |       | ±0.25pF | GQM2195C2E3R0CB12# |  |        |               |         |       | ±5%     | GQM2195C2E220JB12# |  |
|        |               |         | 3.3pF | ±0.1pF  | GQM2195C2E3R3BB12# |  |        |               |         | 24pF  | ±2%     | GQM2195C2E240GB12# |  |
|        |               |         |       | ±0.25pF | GQM2195C2E3R3CB12# |  |        |               |         |       | ±5%     | GQM2195C2E240JB12# |  |
|        |               |         | 3.6pF | ±0.1pF  | GQM2195C2E3R6BB12# |  |        |               |         | 27pF  | ±2%     | GQM2195C2E270GB12# |  |
|        |               |         |       | ±0.25pF | GQM2195C2E3R6CB12# |  |        |               |         |       | ±5%     | GQM2195C2E270JB12# |  |
|        |               |         | 3.9pF | ±0.1pF  | GQM2195C2E3R9BB12# |  |        |               |         | 30pF  | ±2%     | GQM2195C2E300GB12# |  |
|        |               |         |       | ±0.25pF | GQM2195C2E3R9CB12# |  |        |               |         |       | ±5%     | GQM2195C2E300JB12# |  |
|        |               |         | 4.0pF | ±0.1pF  | GQM2195C2E4R0BB12# |  |        |               |         | 33pF  | ±2%     | GQM2195C2E330GB12# |  |
|        |               |         |       | ±0.25pF | GQM2195C2E4R0CB12# |  |        |               |         |       | ±5%     | GQM2195C2E330JB12# |  |
|        |               |         | 4.3pF | ±0.1pF  | GQM2195C2E4R3BB12# |  |        |               |         | 36pF  | ±2%     | GQM2195C2E360GB12# |  |
|        |               |         |       | ±0.25pF | GQM2195C2E4R3CB12# |  |        |               |         |       | ±5%     | GQM2195C2E360JB12# |  |
|        |               |         | 4.7pF | ±0.1pF  | GQM2195C2E4R7BB12# |  |        |               |         | 39pF  | ±2%     | GQM2195C2E390GB12# |  |
|        |               |         |       | ±0.25pF | GQM2195C2E4R7CB12# |  |        |               |         |       | ±5%     | GQM2195C2E390JB12# |  |
|        |               |         | 5.0pF | ±0.1pF  | GQM2195C2E5R0BB12# |  |        |               |         | 43pF  | ±2%     | GQM2195C2E430GB12# |  |
|        |               |         |       | ±0.25pF | GQM2195C2E5R0CB12# |  |        |               |         |       | ±5%     | GQM2195C2E430JB12# |  |
|        |               |         | 5.1pF | ±0.25pF | GQM2195C2E5R1CB12# |  |        |               |         | 47pF  | ±2%     | GQM2195C2E470GB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2E5R1DB12# |  |        |               |         |       | ±5%     | GQM2195C2E470JB12# |  |
|        |               |         | 5.6pF | ±0.25pF | GQM2195C2E5R6CB12# |  |        |               |         | 51pF  | ±2%     | GQM2195C2E510GB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2E5R6DB12# |  |        |               |         |       | ±5%     | GQM2195C2E510JB12# |  |
|        |               |         | 6.0pF | ±0.25pF | GQM2195C2E6R0CB12# |  |        |               |         | 56pF  | ±2%     | GQM2195C2E560GB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2E6R0DB12# |  |        |               |         |       | ±5%     | GQM2195C2E560JB12# |  |
|        |               |         | 6.2pF | ±0.25pF | GQM2195C2E6R2CB12# |  |        |               |         | 62pF  | ±2%     | GQM2195C2E620GB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2E6R2DB12# |  |        |               |         |       | ±5%     | GQM2195C2E620JB12# |  |
|        |               |         | 6.8pF | ±0.25pF | GQM2195C2E6R8CB12# |  |        |               |         | 68pF  | ±2%     | GQM2195C2E680GB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2E6R8DB12# |  |        |               |         |       | ±5%     | GQM2195C2E680JB12# |  |
|        |               |         | 7.0pF | ±0.25pF | GQM2195C2E7R0CB12# |  |        |               |         | 75pF  | ±2%     | GQM2195C2E750GB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2E7R0DB12# |  |        |               |         |       | ±5%     | GQM2195C2E750JB12# |  |
|        |               |         | 7.5pF | ±0.25pF | GQM2195C2E7R5CB12# |  |        |               |         | 82pF  | ±2%     | GQM2195C2E820GB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2E7R5DB12# |  |        |               |         |       | ±5%     | GQM2195C2E820JB12# |  |
|        |               |         | 8.0pF | ±0.25pF | GQM2195C2E8R0CB12# |  |        |               |         | 91pF  | ±2%     | GQM2195C2E910GB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2E8R0DB12# |  |        |               |         |       | ±5%     | GQM2195C2E910JB12# |  |
|        |               |         | 8.2pF | ±0.25pF | GQM2195C2E8R2CB12# |  |        |               |         | 100pF | ±2%     | GQM2195C2E101GB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2E8R2DB12# |  |        |               |         |       | ±5%     | GQM2195C2E101JB12# |  |
|        |               |         | 9.0pF | ±0.25pF | GQM2195C2E9R0CB12# |  |        |               | X8G     | 1.0pF | ±0.1pF  | GQM2195G2E1R0BB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2E9R0DB12# |  |        |               |         |       | ±0.25pF | GQM2195G2E1R0CB12# |  |
|        |               |         | 9.1pF | ±0.25pF | GQM2195C2E9R1CB12# |  |        |               |         | 1.1pF | ±0.1pF  | GQM2195G2E1R1BB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195C2E9R1DB12# |  |        |               |         |       | ±0.25pF | GQM2195G2E1R1CB12# |  |
|        |               |         | 10pF  | ±2%     | GQM2195C2E100GB12# |  |        |               |         | 1.2pF | ±0.1pF  | GQM2195G2E1R2BB12# |  |
|        |               |         |       | ±5%     | GQM2195C2E100JB12# |  |        |               |         |       | ±0.25pF | GQM2195G2E1R2CB12# |  |
|        |               |         | 11pF  | ±2%     | GQM2195C2E110GB12# |  |        |               |         | 1.3pF | ±0.1pF  | GQM2195G2E1R3BB12# |  |
|        |               |         |       | ±5%     | GQM2195C2E110JB12# |  |        |               |         |       | ±0.25pF | GQM2195G2E1R3CB12# |  |
|        |               |         | 12pF  | ±2%     | GQM2195C2E120GB12# |  |        |               |         | 1.5pF | ±0.1pF  | GQM2195G2E1R5BB12# |  |
|        |               |         |       | ±5%     | GQM2195C2E120JB12# |  |        |               |         |       | ±0.25pF | GQM2195G2E1R5CB12# |  |
|        |               |         | 13pF  | ±2%     | GQM2195C2E130GB12# |  |        |               |         | 1.6pF | ±0.1pF  | GQM2195G2E1R6BB12# |  |
|        |               |         |       | ±5%     | GQM2195C2E130JB12# |  |        |               |         |       | ±0.25pF | GQM2195G2E1R6CB12# |  |
|        |               |         | 15pF  | ±2%     | GQM2195C2E150GB12# |  |        |               |         | 1.8pF | ±0.1pF  | GQM2195G2E1R8BB12# |  |
|        |               |         |       | ±5%     | GQM2195C2E150JB12# |  |        |               |         |       | ±0.25pF | GQM2195G2E1R8CB12# |  |
|        |               |         | 16pF  | ±2%     | GQM2195C2E160GB12# |  |        |               |         | 2.0pF | ±0.1pF  | GQM2195G2E2R0BB12# |  |
|        |               |         |       | ±5%     | GQM2195C2E160JB12# |  |        |               |         |       | ±0.25pF | GQM2195G2E2R0CB12# |  |
|        |               |         | 18pF  | ±2%     | GQM2195C2E180GB12# |  |        |               |         | 2.2pF | ±0.1pF  | GQM2195G2E2R2BB12# |  |
|        |               |         |       | ±5%     | GQM2195C2E180JB12# |  |        |               |         |       | ±0.25pF | GQM2195G2E2R2CB12# |  |

Part number # indicates the package specification code.

## GQM Series Temperature Compensating Type High Q Part Number List

(→ 2.0×1.25mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 1.0mm  | 250Vdc        | X8G     | 2.4pF | ±0.1pF  | GQM2195G2E2R4BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2E2R4CB12# |  |
|        |               |         | 2.7pF | ±0.1pF  | GQM2195G2E2R7BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2E2R7CB12# |  |
|        |               |         | 3.0pF | ±0.1pF  | GQM2195G2E3R0BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2E3R0CB12# |  |
|        |               |         | 3.3pF | ±0.1pF  | GQM2195G2E3R3BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2E3R3CB12# |  |
|        |               |         | 3.6pF | ±0.1pF  | GQM2195G2E3R6BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2E3R6CB12# |  |
|        |               |         | 3.9pF | ±0.1pF  | GQM2195G2E3R9BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2E3R9CB12# |  |
|        |               |         | 4.0pF | ±0.1pF  | GQM2195G2E4R0BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2E4R0CB12# |  |
|        |               |         | 4.3pF | ±0.1pF  | GQM2195G2E4R3BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2E4R3CB12# |  |
|        |               |         | 4.7pF | ±0.1pF  | GQM2195G2E4R7BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2E4R7CB12# |  |
|        |               |         | 5.0pF | ±0.1pF  | GQM2195G2E5R0BB12# |  |
|        |               |         |       | ±0.25pF | GQM2195G2E5R0CB12# |  |
|        |               |         | 5.1pF | ±0.25pF | GQM2195G2E5R1CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2E5R1DB12# |  |
|        |               |         | 5.6pF | ±0.25pF | GQM2195G2E5R6CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2E5R6DB12# |  |
|        |               |         | 6.0pF | ±0.25pF | GQM2195G2E6R0CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2E6R0DB12# |  |
|        |               |         | 6.2pF | ±0.25pF | GQM2195G2E6R2CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2E6R2DB12# |  |
|        |               |         | 6.8pF | ±0.25pF | GQM2195G2E6R8CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2E6R8DB12# |  |
|        |               |         | 7.0pF | ±0.25pF | GQM2195G2E7R0CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2E7R0DB12# |  |
|        |               |         | 7.5pF | ±0.25pF | GQM2195G2E7R5CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2E7R5DB12# |  |
|        |               |         | 8.0pF | ±0.25pF | GQM2195G2E8R0CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2E8R0DB12# |  |
|        |               |         | 8.2pF | ±0.25pF | GQM2195G2E8R2CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2E8R2DB12# |  |
|        |               |         | 9.0pF | ±0.25pF | GQM2195G2E9R0CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2E9R0DB12# |  |
|        |               |         | 9.1pF | ±0.25pF | GQM2195G2E9R1CB12# |  |
|        |               |         |       | ±0.5pF  | GQM2195G2E9R1DB12# |  |
|        |               |         | 10pF  | ±2%     | GQM2195G2E100GB12# |  |
|        |               |         |       | ±5%     | GQM2195G2E100JB12# |  |
|        |               |         | 11pF  | ±2%     | GQM2195G2E110GB12# |  |
|        |               |         |       | ±5%     | GQM2195G2E110JB12# |  |
|        |               |         | 12pF  | ±2%     | GQM2195G2E120GB12# |  |
|        |               |         |       | ±5%     | GQM2195G2E120JB12# |  |
|        |               |         | 13pF  | ±2%     | GQM2195G2E130GB12# |  |
|        |               |         |       | ±5%     | GQM2195G2E130JB12# |  |
|        |               |         | 15pF  | ±2%     | GQM2195G2E150GB12# |  |
|        |               |         |       | ±5%     | GQM2195G2E150JB12# |  |
|        |               |         | 16pF  | ±2%     | GQM2195G2E160GB12# |  |
|        |               |         |       | ±5%     | GQM2195G2E160JB12# |  |

| T max. | Rated Voltage | TC Code | Cap. | Tol. | Part Number        |  |
|--------|---------------|---------|------|------|--------------------|--|
| 1.0mm  | 250Vdc        | X8G     | 18pF | ±2%  | GQM2195G2E180GB12# |  |
|        |               |         |      | ±5%  | GQM2195G2E180JB12# |  |
|        |               |         | 20pF | ±2%  | GQM2195G2E200GB12# |  |
|        |               |         |      | ±5%  | GQM2195G2E200JB12# |  |
|        |               |         | 22pF | ±2%  | GQM2195G2E220GB12# |  |
|        |               |         |      | ±5%  | GQM2195G2E220JB12# |  |

2.8×2.8mm

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 1.35mm | 500Vdc        | COG     | 1.0pF | ±0.1pF  | GQM22M5C2H1R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H1R0CB01# |  |
|        |               |         | 1.1pF | ±0.1pF  | GQM22M5C2H1R1BB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H1R1CB01# |  |
|        |               |         | 1.2pF | ±0.1pF  | GQM22M5C2H1R2BB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H1R2CB01# |  |
|        |               |         | 1.3pF | ±0.1pF  | GQM22M5C2H1R3BB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H1R3CB01# |  |
|        |               |         | 1.5pF | ±0.1pF  | GQM22M5C2H1R5BB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H1R5CB01# |  |
|        |               |         | 1.6pF | ±0.1pF  | GQM22M5C2H1R6BB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H1R6CB01# |  |
|        |               |         | 1.8pF | ±0.1pF  | GQM22M5C2H1R8BB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H1R8CB01# |  |
|        |               |         | 2.0pF | ±0.1pF  | GQM22M5C2H2R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H2R0CB01# |  |
|        |               |         | 2.2pF | ±0.1pF  | GQM22M5C2H2R2BB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H2R2CB01# |  |
|        |               |         | 2.4pF | ±0.1pF  | GQM22M5C2H2R4BB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H2R4CB01# |  |
|        |               |         | 2.7pF | ±0.1pF  | GQM22M5C2H2R7BB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H2R7CB01# |  |
|        |               |         | 3.0pF | ±0.1pF  | GQM22M5C2H3R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H3R0CB01# |  |
|        |               |         | 3.3pF | ±0.1pF  | GQM22M5C2H3R3BB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H3R3CB01# |  |
|        |               |         | 3.6pF | ±0.1pF  | GQM22M5C2H3R6BB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H3R6CB01# |  |
|        |               |         | 3.9pF | ±0.1pF  | GQM22M5C2H3R9BB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H3R9CB01# |  |
|        |               |         | 4.0pF | ±0.1pF  | GQM22M5C2H4R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H4R0CB01# |  |
|        |               |         | 4.3pF | ±0.1pF  | GQM22M5C2H4R3BB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H4R3CB01# |  |
|        |               |         | 4.7pF | ±0.1pF  | GQM22M5C2H4R7BB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H4R7CB01# |  |
|        |               |         | 5.0pF | ±0.1pF  | GQM22M5C2H5R0BB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H5R0CB01# |  |
|        |               |         | 5.1pF | ±0.25pF | GQM22M5C2H5R1CB01# |  |
|        |               |         |       | ±0.5pF  | GQM22M5C2H5R1DB01# |  |
|        |               |         | 5.6pF | ±0.25pF | GQM22M5C2H5R6CB01# |  |
|        |               |         |       | ±0.5pF  | GQM22M5C2H5R6DB01# |  |
|        |               |         | 6.0pF | ±0.25pF | GQM22M5C2H6R0CB01# |  |

Part number # indicates the package specification code.

## GQM Series Temperature Compensating Type High Q Part Number List

(→ 2.8×2.8mm)

| T max. | Rated Voltage | TC Code | Cap.  | Tol.    | Part Number        |  |
|--------|---------------|---------|-------|---------|--------------------|--|
| 1.35mm | 500Vdc        | COG     | 6.0pF | ±0.5pF  | GQM22M5C2H6R0DB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H6R2CB01# |  |
|        |               |         | 6.2pF | ±0.5pF  | GQM22M5C2H6R2DB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H6R8CB01# |  |
|        |               |         | 6.8pF | ±0.5pF  | GQM22M5C2H6R8DB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H7R0CB01# |  |
|        |               |         | 7.0pF | ±0.5pF  | GQM22M5C2H7R0DB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H7R5CB01# |  |
|        |               |         | 7.5pF | ±0.5pF  | GQM22M5C2H7R5DB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H8R0CB01# |  |
|        |               |         | 8.0pF | ±0.5pF  | GQM22M5C2H8R0DB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H8R2CB01# |  |
|        |               |         | 8.2pF | ±0.5pF  | GQM22M5C2H8R2DB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H9R0CB01# |  |
|        |               |         | 9.0pF | ±0.5pF  | GQM22M5C2H9R0DB01# |  |
|        |               |         |       | ±0.25pF | GQM22M5C2H9R1CB01# |  |
|        |               |         | 9.1pF | ±0.5pF  | GQM22M5C2H9R1DB01# |  |
|        |               |         |       | ±2%     | GQM22M5C2H100GB01# |  |
|        |               |         | 10pF  | ±5%     | GQM22M5C2H100JB01# |  |
|        |               |         |       | ±2%     | GQM22M5C2H110GB01# |  |
|        |               |         | 11pF  | ±5%     | GQM22M5C2H110JB01# |  |
|        |               |         |       | ±2%     | GQM22M5C2H120GB01# |  |
|        |               |         | 12pF  | ±5%     | GQM22M5C2H120JB01# |  |
|        |               |         |       | ±2%     | GQM22M5C2H130GB01# |  |
|        |               |         | 13pF  | ±5%     | GQM22M5C2H130JB01# |  |
|        |               |         |       | ±2%     | GQM22M5C2H150GB01# |  |
|        |               |         | 15pF  | ±5%     | GQM22M5C2H150JB01# |  |
|        |               |         |       | ±2%     | GQM22M5C2H160GB01# |  |
|        |               |         | 16pF  | ±5%     | GQM22M5C2H160JB01# |  |
|        |               |         |       | ±2%     | GQM22M5C2H180GB01# |  |
|        |               |         | 18pF  | ±5%     | GQM22M5C2H180JB01# |  |
|        |               |         |       | ±2%     | GQM22M5C2H200GB01# |  |
|        |               |         | 20pF  | ±5%     | GQM22M5C2H200JB01# |  |
|        |               |         |       | ±2%     | GQM22M5C2H220GB01# |  |
|        |               |         | 22pF  | ±5%     | GQM22M5C2H220JB01# |  |
|        |               |         |       | ±2%     | GQM22M5C2H240GB01# |  |
|        |               |         | 24pF  | ±5%     | GQM22M5C2H240JB01# |  |
|        |               |         |       | ±2%     | GQM22M5C2H270GB01# |  |
|        |               |         | 27pF  | ±5%     | GQM22M5C2H270JB01# |  |
|        |               |         |       | ±2%     | GQM22M5C2H300GB01# |  |
|        |               |         | 30pF  | ±5%     | GQM22M5C2H300JB01# |  |
|        |               |         |       | ±2%     | GQM22M5C2H330GB01# |  |
|        |               |         | 33pF  | ±5%     | GQM22M5C2H330JB01# |  |
|        |               |         |       | ±2%     | GQM22M5C2H360GB01# |  |
|        |               |         | 36pF  | ±5%     | GQM22M5C2H360JB01# |  |
|        |               |         |       | ±2%     | GQM22M5C2H390GB01# |  |
|        |               |         | 39pF  | ±5%     | GQM22M5C2H390JB01# |  |
|        |               |         |       | ±2%     | GQM22M5C2H430GB01# |  |
|        |               |         | 43pF  | ±5%     | GQM22M5C2H430JB01# |  |
|        |               |         |       | ±2%     | GQM22M5C2H470GB01# |  |
|        |               |         | 47pF  | ±5%     | GQM22M5C2H470JB01# |  |
|        |               |         |       | ±2%     | GQM22M5C2H510GB01# |  |
|        |               |         | 51pF  | ±5%     | GQM22M5C2H510JB01# |  |
|        |               |         |       | ±2%     | GQM22M5C2H560GB01# |  |
|        |               |         | 56pF  | ±2%     |                    |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol. | Part Number        |  |
|--------|---------------|---------|-------|------|--------------------|--|
| 1.35mm | 500Vdc        | COG     | 56pF  | ±5%  | GQM22M5C2H560JB01# |  |
|        |               |         |       | ±2%  | GQM22M5C2H620GB01# |  |
|        |               |         | 62pF  | ±5%  | GQM22M5C2H620JB01# |  |
|        |               |         |       | ±2%  | GQM22M5C2H680GB01# |  |
|        |               |         | 68pF  | ±5%  | GQM22M5C2H680JB01# |  |
|        |               |         |       | ±2%  | GQM22M5C2H750GB01# |  |
|        |               |         | 75pF  | ±5%  | GQM22M5C2H750JB01# |  |
|        |               |         |       | ±2%  | GQM22M5C2H820GB01# |  |
|        |               |         | 82pF  | ±5%  | GQM22M5C2H820JB01# |  |
|        |               |         |       | ±2%  | GQM22M5C2H910GB01# |  |
|        |               |         | 91pF  | ±5%  | GQM22M5C2H910JB01# |  |
|        |               |         |       | ±2%  | GQM22M5C2H101GB01# |  |
|        |               |         | 100pF | ±5%  | GQM22M5C2H101JB01# |  |

Part number # indicates the package specification code.

## High Effective Capacitance & High Allowable Ripple Current Monolithic Ceramic Capacitor

# GR3 Series



Anti-noise

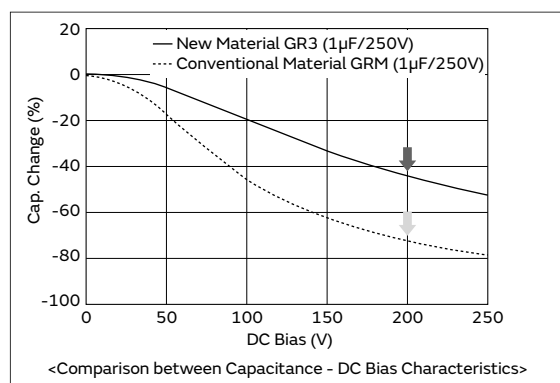
WEB

This is a general purpose high ripple resistance product excellent in DC bias characteristics.

### Features

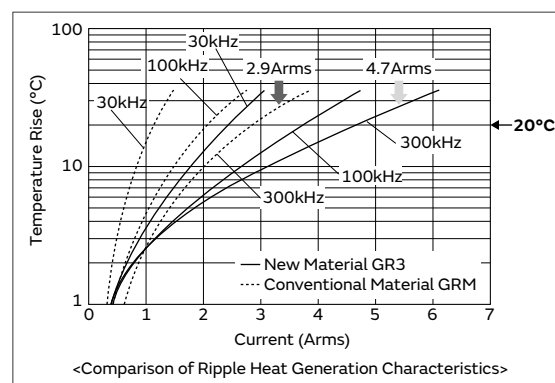
- ① When a DC bias is applied, a capacitance higher than conventional products (X7R characteristics) can be acquired.

About twice the capacitance can be secured when DC200V is applied.



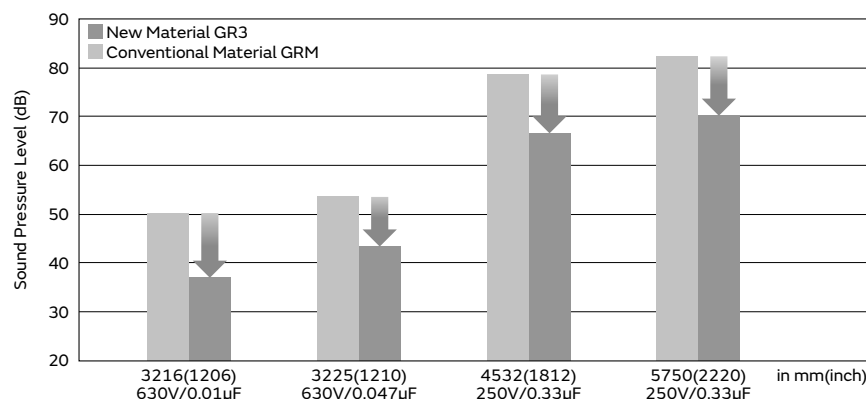
- ② Improved ripple resistance performance compared to conventional products (X7R characteristics).

In the case of a product with a capacitance of 1μF, when the exothermic temperature reaches 20°C at frequency f=300kHz, the amount of resistance of a product with conventional material is 2.9Arms; however, the new material is 4.7Arms.



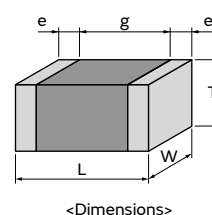
- ③ This product has a noise reduction effect.

Since dielectric materials which enable a reduction of noise are used, this product is more effective for reducing noise compared to the general purpose GRM series.



### Specifications

|                   |                                                                                                      |
|-------------------|------------------------------------------------------------------------------------------------------|
| Size (mm)         | 2.0×1.25mm to 5.7×5.0mm                                                                              |
| Rated Voltage     | 250Vdc to 630Vdc                                                                                     |
| Capacitance       | 10000pF to 1.0μF                                                                                     |
| Main Applications | For PFC (Power Factor Correction) Circuits of Power Supplies, EMI Suppression and Smoothing Circuits |



This catalog contains only a portion of the product lineup.  
Please refer to the capacitor search tool on the Murata Web site for details.

## GR3 Series High Dielectric Constant Type Anti-noise Part Number List

### 2.0×1.25mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 1.0mm  | 250Vdc        | X7T     | 10000pF | ±10% | GR321AD72E103KW01# |  |
|        |               |         | 15000pF | ±10% | GR321AD72E153KW01# |  |
| 1.45mm | 250Vdc        | X7T     | 22000pF | ±10% | GR321BD72E223KW03# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol. | Part Number        |  |
|--------|---------------|---------|-------|------|--------------------|--|
| 2.7mm  | 250Vdc        | X7T     | 1.0μF | ±10% | GR355XD72E105KW05# |  |

### 3.2×1.6mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 1.0mm  | 450Vdc        | X7T     | 10000pF | ±10% | GR331AD72W103KW01# |  |
|        |               |         | 15000pF | ±10% | GR331AD72W153KW01# |  |
|        | 250Vdc        | X7T     | 33000pF | ±10% | GR331AD72E333KW01# |  |
| 1.25mm | 630Vdc        | X7T     | 10000pF | ±10% | GR331BD72J103KW01# |  |
|        | 450Vdc        | X7T     | 22000pF | ±10% | GR331BD72W223KW01# |  |
|        |               |         | 33000pF | ±10% | GR331BD72W333KW01# |  |
|        | 250Vdc        | X7T     | 47000pF | ±10% | GR331BD72E473KW01# |  |
| 1.8mm  | 630Vdc        | X7T     | 15000pF | ±10% | GR331CD72J153KW03# |  |
|        | 450Vdc        | X7T     | 47000pF | ±10% | GR331CD72W473KW03# |  |
|        | 250Vdc        | X7T     | 68000pF | ±10% | GR331CD72E683KW03# |  |

### 3.2×2.5mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 1.5mm  | 630Vdc        | X7T     | 22000pF | ±10% | GR332QD72J223KW01# |  |
|        | 250Vdc        | X7T     | 0.10μF  | ±10% | GR332QD72E104KW01# |  |
| 2.0mm  | 630Vdc        | X7T     | 33000pF | ±10% | GR332DD72J333KW01# |  |
|        |               |         | 47000pF | ±10% | GR332DD72J473KW01# |  |
|        | 450Vdc        | X7T     | 68000pF | ±10% | GR332DD72W683KW01# |  |
|        |               |         | 0.10μF  | ±10% | GR332DD72W104KW01# |  |
|        |               |         | 0.15μF  | ±10% | GR332DD72E154KW01# |  |

### 4.5×3.2mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 1.5mm  | 250Vdc        | X7T     | 0.22μF  | ±10% | GR343QD72E224KW01# |  |
| 2.0mm  | 630Vdc        | X7T     | 68000pF | ±10% | GR343DD72J683KW01# |  |
|        | 450Vdc        | X7T     | 0.15μF  | ±10% | GR343DD72W154KW01# |  |
|        | 250Vdc        | X7T     | 0.33μF  | ±10% | GR343DD72E334KW01# |  |

### 5.7×5.0mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |  |
|--------|---------------|---------|--------|------|--------------------|--|
| 2.0mm  | 630Vdc        | X7T     | 0.10μF | ±10% | GR355DD72J104KW01# |  |
|        |               |         | 0.15μF | ±10% | GR355DD72J154KW01# |  |
|        | 450Vdc        | X7T     | 0.22μF | ±10% | GR355DD72W224KW01# |  |
|        |               |         | 0.33μF | ±10% | GR355DD72W334KW01# |  |
|        |               |         | 0.47μF | ±10% | GR355DD72W474KW01# |  |
|        |               |         | 0.68μF | ±10% | GR355DD72E684KW01# |  |
|        | 250Vdc        | X7T     | 0.47μF | ±10% | GR355DD72E474KW01# |  |
| 2.7mm  | 630Vdc        | X7T     | 0.22μF | ±10% | GR355XD72J224KW05# |  |

Part number # indicates the package specification code.

## Soft termination Monolithic Ceramic Capacitors

# GRJ Series

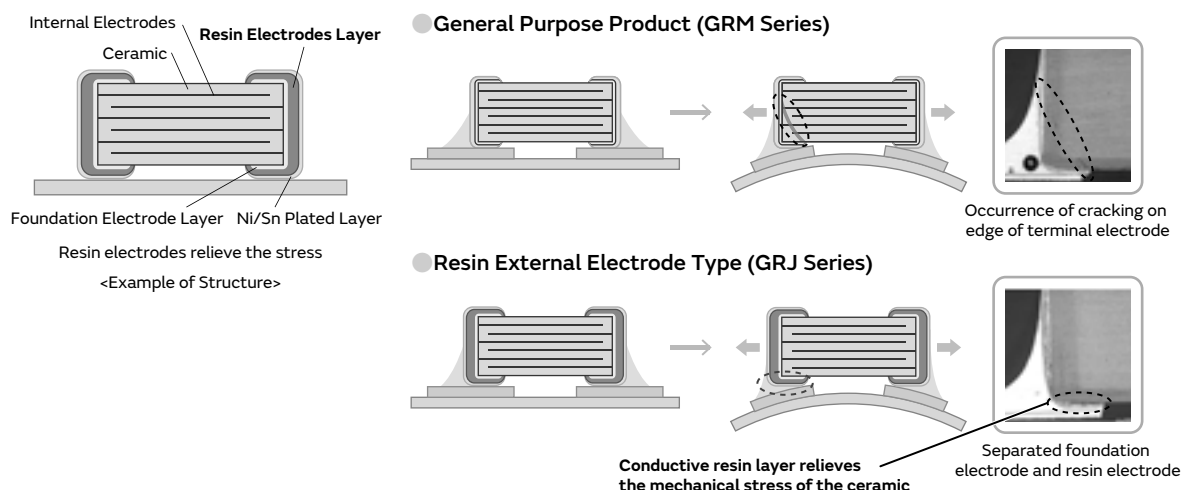


The resin external electrodes prevent the occurrence of cracking caused by deflection stress after board mounting!

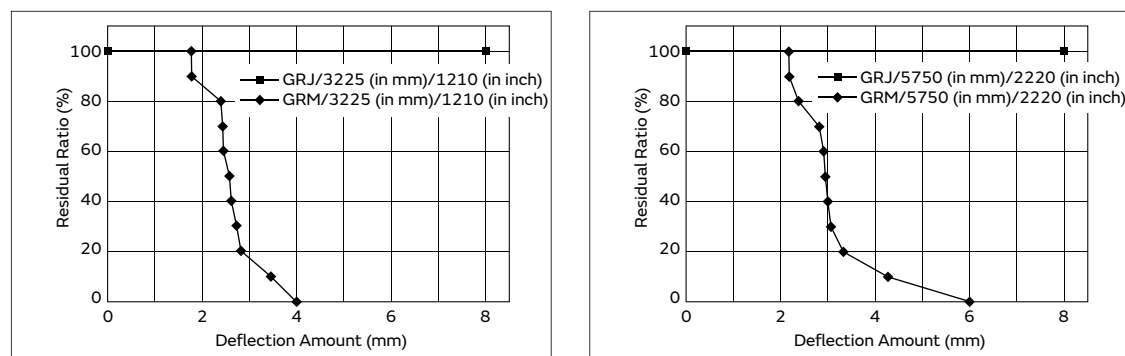
## Features

### ① The resin external electrodes suppress cracks by board deflection.

Cracking of the ceramic element is suppressed by the resin of the external electrodes, which releases the stress.



### ② Suppresses the occurrence of cracking caused by deflection stress at the time of board mounting, etc.

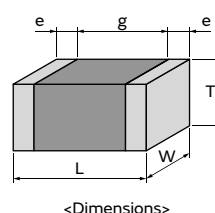


Due to the specification of the measuring instrument, measurements can be performed up to 8mm.

### ③ Ideal for consumer and industrial electronic equipment, etc. where there heat stress, vibration and impact are applied.

## Specifications

|                   |                                            |
|-------------------|--------------------------------------------|
| Size (mm)         | 0.6×0.3mm to 5.7×5.0mm                     |
| Rated Voltage     | 6.3Vdc to 1000Vdc                          |
| Capacitance       | 220pF to 47μF                              |
| Main Applications | Consumer & Industrial Electronic Equipment |



This catalog contains only a portion of the product lineup.  
Please refer to the capacitor search tool on the Murata Web site for details.

# GRJ Series High Dielectric Constant Type Part Number List

## 1.6×0.8mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 0.9mm  | 100Vdc        | X7R     | 1000pF  | ±10% | GRJ188R72A102KE11# |  |
|        |               |         |         | ±20% | GRJ188R72A102ME11# |  |
|        |               |         | 2200pF  | ±10% | GRJ188R72A222KE11# |  |
|        |               |         |         | ±20% | GRJ188R72A222ME11# |  |
|        |               |         | 4700pF  | ±10% | GRJ188R72A472KE11# |  |
|        |               |         |         | ±20% | GRJ188R72A472ME11# |  |
|        |               |         | 10000pF | ±10% | GRJ188R72A103KE11# |  |
|        |               |         |         | ±20% | GRJ188R72A103ME11# |  |
|        |               |         | 22000pF | ±10% | GRJ188R72A223KE11# |  |
|        |               |         |         | ±20% | GRJ188R72A223ME11# |  |
|        |               |         | 0.10μF  | ±10% | GRJ188R72A104KE11# |  |
|        |               |         |         | ±20% | GRJ188R72A104ME11# |  |
|        | 50Vdc         | X7R     | 1000pF  | ±10% | GRJ188R71H102KE11# |  |
|        |               |         |         | ±20% | GRJ188R71H102ME11# |  |
|        |               |         | 2200pF  | ±10% | GRJ188R71H222KE11# |  |
|        |               |         |         | ±20% | GRJ188R71H222ME11# |  |
|        |               |         | 4700pF  | ±10% | GRJ188R71H472KE11# |  |
|        |               |         |         | ±20% | GRJ188R71H472ME11# |  |
|        |               |         | 10000pF | ±10% | GRJ188R71H103KE11# |  |
|        |               |         |         | ±20% | GRJ188R71H103ME11# |  |
|        |               |         | 22000pF | ±10% | GRJ188R71H223KE11# |  |
|        |               |         |         | ±20% | GRJ188R71H223ME11# |  |
|        |               |         | 47000pF | ±10% | GRJ188R71H473KE11# |  |
|        |               |         |         | ±20% | GRJ188R71H473ME11# |  |
|        | 35Vdc         | X5R     | 1.0μF   | ±10% | GRJ188R6YA105KE11# |  |
|        |               |         |         | ±20% | GRJ188R6YA105ME11# |  |
|        |               |         | 2.2μF   | ±10% | GRJ188R71E473KE11# |  |
|        |               |         |         | ±20% | GRJ188R71E473ME11# |  |
|        |               |         | 0.22μF  | ±10% | GRJ188R71E224KE11# |  |
|        |               |         |         | ±20% | GRJ188R71E224ME11# |  |
| 1.0mm  | 25Vdc         | X7R     | 47000pF | ±10% | GRJ188R71E473KE11# |  |
|        |               |         |         | ±20% | GRJ188R71E473ME11# |  |
|        |               |         | 0.22μF  | ±10% | GRJ188R71E224KE11# |  |
|        |               |         |         | ±20% | GRJ188R71E224ME11# |  |
|        |               |         | 1.0μF   | ±10% | GRJ188R71E105KE11# |  |
|        |               |         |         | ±20% | GRJ188R71E105ME11# |  |
|        | 16Vdc         | X7R     | 0.47μF  | ±10% | GRJ188R71C474KE11# |  |
|        |               |         |         | ±20% | GRJ188R71C474ME11# |  |
|        |               |         | 2.2μF   | ±10% | GRJ188R70J225KE11# |  |
|        |               |         |         | ±20% | GRJ188R70J225ME11# |  |
|        | 6.3Vdc        | X7R     | 2.2μF   | ±10% | GRJ188R70J225KE11# |  |
|        |               |         |         | ±20% | GRJ188R70J225ME11# |  |
| 1.0mm  | 6.3Vdc        | X7S     | 4.7μF   | ±10% | GRJ188C70J475KE11# |  |
|        |               |         |         | ±20% | GRJ188C70J475ME11# |  |

## 2.0×1.25mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |  |
|--------|---------------|---------|--------|------|--------------------|--|
| 0.7mm  | 100Vdc        | X7R     | 1000pF | ±10% | GRJ216R72A102KE01# |  |
|        |               |         |        | ±20% | GRJ216R72A102ME01# |  |
|        |               |         | 2200pF | ±10% | GRJ216R72A222KE01# |  |
|        |               |         |        | ±20% | GRJ216R72A222ME01# |  |
|        |               |         | 4700pF | ±10% | GRJ216R72A472KE01# |  |
|        |               |         |        | ±20% | GRJ216R72A472ME01# |  |
|        |               |         |        | ±10% | GRJ216R72A103KE01# |  |
|        |               |         |        | ±20% | GRJ216R72A103ME01# |  |

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 0.7mm  | 100Vdc        | X7R     | 1000pF  | ±10% | GRJ216R72A103KE01# |  |
|        |               |         |         | ±20% | GRJ216R72A103ME01# |  |
|        |               |         | 2200pF  | ±10% | GRJ216R72A223KE01# |  |
|        |               |         |         | ±20% | GRJ216R72A223ME01# |  |
|        |               |         | 470pF   | ±10% | GRJ216R71H471KE01# |  |
|        |               |         |         | ±20% | GRJ216R71H471ME01# |  |
|        | 50Vdc         | X7R     | 1000pF  | ±10% | GRJ216R71H102KE01# |  |
|        |               |         |         | ±20% | GRJ216R71H102ME01# |  |
|        |               |         | 2200pF  | ±10% | GRJ216R71H222KE01# |  |
|        |               |         |         | ±20% | GRJ216R71H222ME01# |  |
|        |               |         | 4700pF  | ±10% | GRJ216R71H472KE01# |  |
|        |               |         |         | ±20% | GRJ216R71H472ME01# |  |
| 0.95mm | 100Vdc        | X7R     | 220pF   | ±10% | GRJ219R72A221KE01# |  |
|        |               |         |         | ±20% | GRJ219R72A221ME01# |  |
|        |               |         | 470pF   | ±10% | GRJ219R72A471KE01# |  |
|        |               |         |         | ±20% | GRJ219R72A471ME01# |  |
|        | 250Vdc        | X7R     | 1000pF  | ±10% | GRJ21AR72E102KWJ1# |  |
|        |               |         |         | ±10% | GRJ21AR72E152KWJ1# |  |
|        |               |         | 2200pF  | ±10% | GRJ21AR72E222KWJ1# |  |
|        |               |         |         | ±10% | GRJ21AR72E332KWJ1# |  |
|        |               |         | 4700pF  | ±10% | GRJ21AR72E472KWJ1# |  |
|        |               |         |         | ±10% | GRJ21AR72E682KWJ1# |  |
| 1.45mm | 250Vdc        | X7R     | 10000pF | ±10% | GRJ21BR72E103KWJ3# |  |
|        |               |         |         | ±10% | GRJ21BR72E153KWJ3# |  |
|        |               |         | 15000pF | ±10% | GRJ21BR72E223KWJ3# |  |
|        |               |         |         | ±10% | GRJ21BR72E223KWJ3# |  |
|        | 100Vdc        | X7R     | 47000pF | ±10% | GRJ21BR72A473KE01# |  |
|        |               |         |         | ±20% | GRJ21BR72A473ME01# |  |
|        |               |         | 0.10μF  | ±10% | GRJ21BR72A104KE01# |  |
|        |               |         |         | ±20% | GRJ21BR72A104ME01# |  |
|        | 50Vdc         | X7R     | 47000pF | ±10% | GRJ21BR71H473KE01# |  |
|        |               |         |         | ±20% | GRJ21BR71H473ME01# |  |
|        |               |         | 0.10μF  | ±10% | GRJ21BR71H104KE01# |  |
|        |               |         |         | ±20% | GRJ21BR71H104ME01# |  |
|        |               |         | 0.22μF  | ±10% | GRJ21BR71H224KE01# |  |
|        |               |         |         | ±20% | GRJ21BR71H224ME01# |  |
|        | 25Vdc         | X7R     | 1.0μF   | ±10% | GRJ21BR71E105KE11# |  |
|        |               |         |         | ±20% | GRJ21BR71E105ME11# |  |
|        |               |         | 2.2μF   | ±10% | GRJ21BR71E225KE01# |  |
|        |               |         |         | ±20% | GRJ21BR71E225ME01# |  |
|        | 16Vdc         | X7R     | 4.7μF   | ±10% | GRJ21BR71C475KE01# |  |
|        |               |         |         | ±20% | GRJ21BR71C475ME01# |  |
| 1.5mm  | 100Vdc        | X7S     | 10μF    | ±10% | GRJ21BR71A106KE01# |  |
|        |               |         |         | ±20% | GRJ21BR71A106ME01# |  |
|        |               |         | 1.0μF   | ±10% | GRJ21BC72A105KE11# |  |
|        |               |         |         | ±20% | GRJ21BC72A105ME11# |  |
|        |               |         |         | ±10% | GRJ21BR71A106KE01# |  |
|        |               |         |         | ±20% | GRJ21BR71A106ME01# |  |
|        |               |         |         | ±10% | GRJ21BR71A106KE01# |  |
|        |               |         |         | ±20% | GRJ21BR71A106ME01# |  |

Part number # indicates the package specification code.

# GRJ Series High Dielectric Constant Type Part Number List

## 3.2×1.6mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 0.95mm | 100Vdc        | X7R     | 0.10μF  | ±10% | GRJ319R72A104KE11# |  |
|        |               |         |         | ±20% | GRJ319R72A104ME11# |  |
|        | 50Vdc         | X7R     | 0.10μF  | ±10% | GRJ319R71H104KE11# |  |
|        |               |         |         | ±20% | GRJ319R71H104ME11# |  |
|        | 1000Vdc       | X7R     | 470pF   | ±10% | GRJ31BR73A471KWJ1# |  |
|        |               |         | 680pF   | ±10% | GRJ31BR73A681KWJ1# |  |
|        |               |         | 1000pF  | ±10% | GRJ31BR73A102KWJ1# |  |
|        |               |         | 1500pF  | ±10% | GRJ31BR73A152KWJ1# |  |
|        |               |         | 2200pF  | ±10% | GRJ31BR73A222KWJ1# |  |
|        |               |         | 3300pF  | ±10% | GRJ31BR73A332KWJ1# |  |
|        |               |         | 4700pF  | ±10% | GRJ31BR73A472KWJ1# |  |
|        | 630Vdc        | X7R     | 1000pF  | ±10% | GRJ31BR72J102KWJ1# |  |
|        |               |         | 1500pF  | ±10% | GRJ31BR72J152KWJ1# |  |
|        |               |         | 2200pF  | ±10% | GRJ31BR72J222KWJ1# |  |
|        |               |         | 3300pF  | ±10% | GRJ31BR72J332KWJ1# |  |
|        |               |         | 4700pF  | ±10% | GRJ31BR72J472KWJ1# |  |
|        |               |         | 6800pF  | ±10% | GRJ31BR72J682KWJ1# |  |
|        |               |         | 10000pF | ±10% | GRJ31BR72J103KWJ1# |  |
|        | 250Vdc        | X7R     | 15000pF | ±10% | GRJ31BR72E153KWJ1# |  |
|        |               |         | 22000pF | ±10% | GRJ31BR72E223KWJ1# |  |
|        |               |         | 68000pF | ±10% | GRJ31BR72E683KWJ1# |  |
| 1.35mm | 100Vdc        | X7R     | 0.22μF  | ±10% | GRJ31MR72A224KE01# |  |
|        |               |         |         | ±20% | GRJ31MR72A224ME01# |  |
|        | 50Vdc         | X7R     | 0.10μF  | ±10% | GRJ31MR71H104KE01# |  |
|        |               |         |         | ±20% | GRJ31MR71H104ME01# |  |
|        |               |         | 0.22μF  | ±10% | GRJ31MR71H224KE01# |  |
|        |               |         |         | ±20% | GRJ31MR71H224ME01# |  |
|        |               |         | 0.47μF  | ±10% | GRJ31MR71H474KE01# |  |
|        |               |         |         | ±20% | GRJ31MR71H474ME01# |  |
|        |               |         | 1.0μF   | ±10% | GRJ31MR71H105KE01# |  |
|        |               |         |         | ±20% | GRJ31MR71H105ME01# |  |
|        | 25Vdc         | X7R     | 2.2μF   | ±10% | GRJ31MR71E225KE11# |  |
|        | 16Vdc         | X7R     | 2.2μF   | ±10% | GRJ31MR71C225KE11# |  |
|        |               |         |         | ±20% | GRJ31MR71C225ME11# |  |
| 1.8mm  | 1000Vdc       | X7R     | 6800pF  | ±10% | GRJ31CR73A682KWJ3# |  |
|        |               |         | 10000pF | ±10% | GRJ31CR73A103KWJ3# |  |
|        | 630Vdc        | X7R     | 15000pF | ±10% | GRJ31CR72J153KWJ3# |  |
|        |               |         | 22000pF | ±10% | GRJ31CR72J223KWJ3# |  |
|        | 250Vdc        | X7R     | 33000pF | ±10% | GRJ31CR72E333KWJ3# |  |
|        |               |         | 47000pF | ±10% | GRJ31CR72E473KWJ3# |  |
|        |               |         | 0.10μF  | ±10% | GRJ31CR72E104KWJ3# |  |
|        | 100Vdc        | X7R     | 1.0μF   | ±10% | GRJ31CR72A105KE11# |  |
|        |               |         |         | ±20% | GRJ31CR72A105ME11# |  |
|        |               | X7R     | 1.0μF   | ±10% | GRJ31CR71H105KE11# |  |
|        |               |         |         | ±20% | GRJ31CR71H105ME11# |  |
|        |               |         | 2.2μF   | ±10% | GRJ31CR71H225KE11# |  |
|        |               |         |         | ±20% | GRJ31CR71H225ME11# |  |
|        |               | X7R     | 4.7μF   | ±10% | GRJ31CR71H475KE11# |  |
|        |               |         |         | ±20% | GRJ31CR71H475ME11# |  |
|        | 25Vdc         | X7R     | 10μF    | ±10% | GRJ31CR71E106KE11# |  |
|        |               |         |         | ±20% | GRJ31CR71E106ME11# |  |

| T max. | Rated Voltage | TC Code | Cap.  | Tol. | Part Number        |  |
|--------|---------------|---------|-------|------|--------------------|--|
| 1.9mm  | 16Vdc         | X7R     | 4.7μF | ±10% | GRJ31CR71C475KE11# |  |
|        |               |         |       | ±20% | GRJ31CR71C475ME11# |  |
|        |               |         | 10μF  | ±10% | GRJ31CR71C106KE11# |  |
|        |               |         |       | ±20% | GRJ31CR71C106ME11# |  |
|        | 10Vdc         | X7R     | 10μF  | ±10% | GRJ31CR71A106KE11# |  |
|        |               |         |       | ±20% | GRJ31CR71A106ME11# |  |
|        |               |         | 22μF  | ±10% | GRJ31CR71A226KE12# |  |
|        |               |         |       | ±20% | GRJ31CR71A226ME12# |  |
|        | 6.3Vdc        | X7R     | 22μF  | ±10% | GRJ31CR70J226KE12# |  |
|        |               |         |       | ±20% | GRJ31CR70J226ME12# |  |

## 3.2×2.5mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 1.5mm  | 1000Vdc       | X7R     | 6800pF  | ±10% | GRJ32QR73A682KWJ1# |  |
|        |               |         | 10000pF | ±10% | GRJ32QR73A103KWJ1# |  |
|        | 630Vdc        | X7R     | 22000pF | ±10% | GRJ32QR72J223KWJ1# |  |
|        | 250Vdc        | X7R     | 68000pF | ±10% | GRJ32QR72E683KWJ1# |  |
|        |               |         | 0.15μF  | ±10% | GRJ32QR72E154KWJ1# |  |
|        | 2.0mm         | X7R     | 15000pF | ±10% | GRJ32DR73A153KWJ1# |  |
|        |               |         | 22000pF | ±10% | GRJ32DR73A223KWJ1# |  |
|        |               | X7R     | 33000pF | ±10% | GRJ32DR72J333KWJ1# |  |
|        |               |         | 47000pF | ±10% | GRJ32DR72J473KWJ1# |  |
|        | 250Vdc        | X7R     | 0.10μF  | ±10% | GRJ32DR72E104KWJ1# |  |
|        |               |         | 0.22μF  | ±10% | GRJ32DR72E224KWJ1# |  |
|        | 2.3mm         | X7R     | 2.2μF   | ±10% | GRJ32DR72A225KE11# |  |
|        |               |         |         | ±20% | GRJ32DR72A225ME11# |  |
| 2.8mm  |               | X7S     | 4.7μF   | ±10% | GRJ32DC72A475KE11# |  |
|        |               |         |         | ±20% | GRJ32DC72A475ME11# |  |
|        | 50Vdc         | X7R     | 4.7μF   | ±10% | GRJ32ER71H475KE11# |  |
|        |               |         |         | ±20% | GRJ32ER71H475ME11# |  |
|        |               | X7S     | 10μF    | ±10% | GRJ32ER71H106KE11# |  |
|        |               |         |         | ±20% | GRJ32ER71H106ME11# |  |
|        | 25Vdc         | X7R     | 10μF    | ±10% | GRJ32ER71E106KE11# |  |
|        |               |         |         | ±20% | GRJ32ER71E106ME11# |  |
|        |               | X7R     | 22μF    | ±10% | GRJ32ER71C226KE11# |  |
|        |               |         |         | ±20% | GRJ32ER71C226ME11# |  |
|        | 10Vdc         | X7R     | 22μF    | ±10% | GRJ32ER71A226KE11# |  |
|        |               |         |         | ±20% | GRJ32ER71A226ME11# |  |
|        |               | X7R     | 47μF    | ±10% | GRJ32ER71A476KE11# |  |
|        |               |         |         | ±20% | GRJ32ER71A476ME11# |  |
|        | 6.3Vdc        | X7R     | 47μF    | ±10% | GRJ32ER70J476KE11# |  |
|        |               |         |         | ±20% | GRJ32ER70J476ME11# |  |

## 4.5×3.2mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 1.5mm  | 630Vdc        | X7R     | 68000pF | ±10% | GRJ43QR72J683KWJ1# |  |
|        | 250Vdc        | X7R     | 0.15μF  | ±10% | GRJ43QR72E154KWJ1# |  |
| 2.0mm  | 1000Vdc       | X7R     | 33000pF | ±10% | GRJ43DR73A333KWJ1# |  |

Part number # indicates the package specification code.

## GRJ Series High Dielectric Constant Type Part Number List

(→ 4.5×3.2mm)

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 2.0mm  | 1000Vdc       | X7R     | 47000pF | ±10% | GRJ43DR73A473KWJ1# |  |
|        | 630Vdc        | X7R     | 0.10μF  | ±10% | GRJ43DR72J104KWJ1# |  |
|        | 250Vdc        | X7R     | 0.22μF  | ±10% | GRJ43DR72E224KWJ1# |  |
|        |               |         | 0.33μF  | ±10% | GRJ43DR72E334KWJ1# |  |
|        |               |         | 0.47μF  | ±10% | GRJ43DR72E474KWJ1# |  |

5.7×5.0mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 2.0mm  | 1000Vdc       | X7R     | 68000pF | ±10% | GRJ55DR73A683KWJ1# |  |
|        |               |         | 0.10μF  | ±10% | GRJ55DR73A104KWJ1# |  |
|        | 630Vdc        | X7R     | 0.15μF  | ±10% | GRJ55DR72J154KWJ1# |  |
|        |               |         | 0.22μF  | ±10% | GRJ55DR72J224KWJ1# |  |
|        | 250Vdc        | X7R     | 0.33μF  | ±10% | GRJ55DR72E334KWJ1# |  |
|        |               |         | 0.47μF  | ±10% | GRJ55DR72E474KWJ1# |  |
|        |               |         | 0.68μF  | ±10% | GRJ55DR72E684KWJ1# |  |
|        |               |         | 1.0μF   | ±10% | GRJ55DR72E105KWJ1# |  |

GRM Series  
GJM Series  
GMA Series  
GMD Series  
GQM Series  
GR3 Series  
GRJ Series  
LLA Series  
LLL Series  
LLM Series  
LLR Series  
KRM Series  
KR3 Series  
NFM Series  
GCH Series  
Caution/Notice

## 8-Terminal Low ESL Monolithic Ceramic Capacitor

# LLA Series

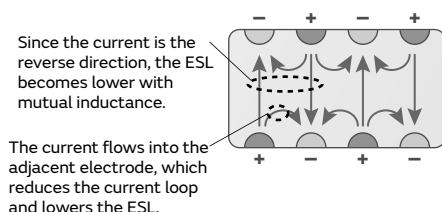
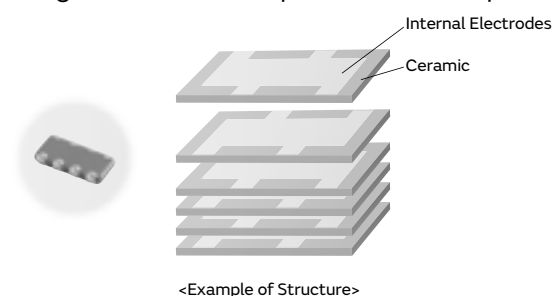


## 8-Terminal Type Low ESL Capacitor Ideal for Power Supply Decoupling of High-speed Operation IC

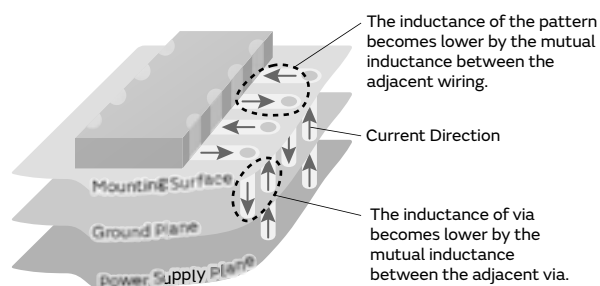
### Features

#### ① Ultra-low ESL

Since the equivalent series inductance (ESL) is very low with excellent high frequency characteristics due to the design structure, this capacitor is ideal for power supply decoupling of high-speed operation IC.



<Effectiveness of Cancelling Out Inductance by Mutual Inductance>



<Effectiveness of Suppressing Inductance when Mounting a Multi-terminal Capacitor>

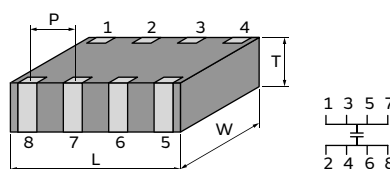
The inductance for the boards also becomes lower, not only the capacitor.

#### ② A maximum operating temperature up to 125°C

This product is applicable to high temperatures (X7\* characteristics); however, Murata also offers numerous thin type products, which are ideal as decoupling capacitors on IC package.

### Specifications

|                   |                               |
|-------------------|-------------------------------|
| Size (mm)         | 1.6×0.8mm to 3.2×1.6mm        |
| Rated Voltage     | 4Vdc to 25Vdc                 |
| Capacitance       | 10000pF to 4.7μF              |
| Main Applications | Application processor/CPU/GPU |



<Dimensions>

This catalog contains only a portion of the product lineup.  
Please refer to the capacitor search tool on the Murata Web site for details.

## LLA Series High Dielectric Constant Type Part Number List

### 1.6×0.8mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |  |
|--------|---------------|---------|--------|------|--------------------|--|
| 0.55mm | 4Vdc          | X7S     | 0.10μF | ±20% | LLA185C70G104MA01# |  |
|        |               |         | 0.22μF | ±20% | LLA185C70G224MA01# |  |
|        |               |         | 0.47μF | ±20% | LLA185C70G474MA01# |  |
|        |               |         | 2.2μF  | ±20% | LLA185C70G225ME16# |  |

### 2.0×1.25mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 0.55mm | 25Vdc         | X7R     | 10000pF | ±20% | LLA215R71E103MA14# |  |
|        |               |         | 22000pF | ±20% | LLA215R71E223MA14# |  |
|        | 16Vdc         | X7R     | 47000pF | ±20% | LLA215R71C473MA14# |  |
|        |               |         | 0.10μF  | ±20% | LLA215R71C104MA14# |  |
|        | 10Vdc         | X7R     | 0.22μF  | ±20% | LLA215R71A224MA14# |  |
|        | 6.3Vdc        | X7R     | 0.47μF  | ±20% | LLA215R70J474MA14# |  |
|        | 4Vdc          | X7S     | 1.0μF   | ±20% | LLA215C70G105MA14# |  |
|        |               |         | 4.7μF   | ±20% | LLA215C70G475ME19# |  |
| 0.95mm | 25Vdc         | X7R     | 10000pF | ±20% | LLA219R71E103MA01# |  |
|        |               |         | 22000pF | ±20% | LLA219R71E223MA01# |  |
|        |               |         | 47000pF | ±20% | LLA219R71E473MA01# |  |
|        | 16Vdc         | X7R     | 0.10μF  | ±20% | LLA219R71C104MA01# |  |
|        |               |         | 0.22μF  | ±20% | LLA219R71C224MA01# |  |
|        | 10Vdc         | X7R     | 0.47μF  | ±20% | LLA219R71A474MA01# |  |
|        | 6.3Vdc        | X7R     | 1.0μF   | ±20% | LLA219R70J105MA01# |  |
|        | 4Vdc          | X7S     | 2.2μF   | ±20% | LLA219C70G225MA01# |  |

### 3.2×1.6mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |  |
|--------|---------------|---------|--------|------|--------------------|--|
| 0.55mm | 16Vdc         | X7R     | 0.22μF | ±20% | LLA315R71C224MA14# |  |
|        | 10Vdc         | X7R     | 0.47μF | ±20% | LLA315R71A474MA14# |  |
|        | 6.3Vdc        | X7R     | 1.0μF  | ±20% | LLA315R70J105MA14# |  |
|        |               |         | 2.2μF  | ±20% | LLA315R70J225MA14# |  |
| 0.95mm | 16Vdc         | X7R     | 0.47μF | ±20% | LLA319R71C474MA01# |  |
|        | 10Vdc         | X7R     | 1.0μF  | ±20% | LLA319R71A105MA01# |  |
| 1.25mm | 16Vdc         | X7R     | 1.0μF  | ±20% | LLA31MR71C105MA01# |  |
|        | 10Vdc         | X7R     | 2.2μF  | ±20% | LLA31MR71A225MA01# |  |

## LW Reversed Type Low ESL Monolithic Ceramic Capacitors

# LLL Series

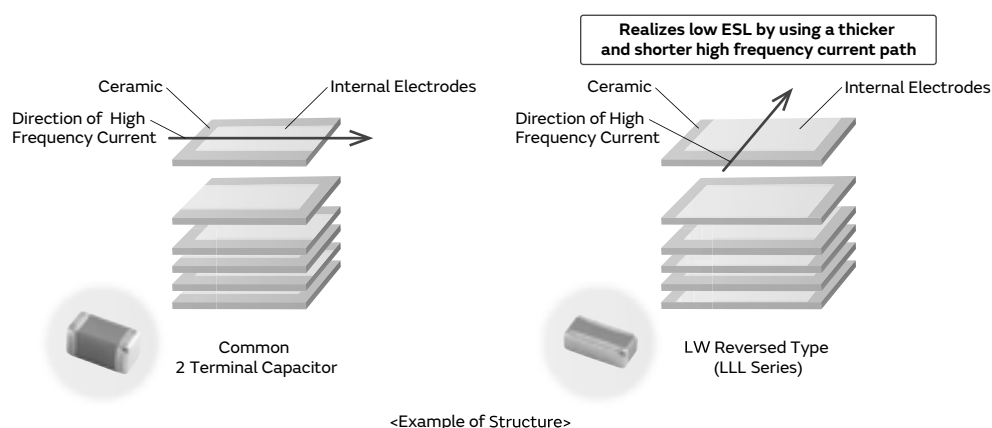


This low ESL capacitor is ideal for power supply decoupling of high-speed operation electronic equipment.

## Features

### 1 Low ESL

Since the equivalent series inductance (ESL) is low and excellent in high frequency characteristics, this capacitor is suitable for power supply decoupling of high-speed operation electronic equipment.

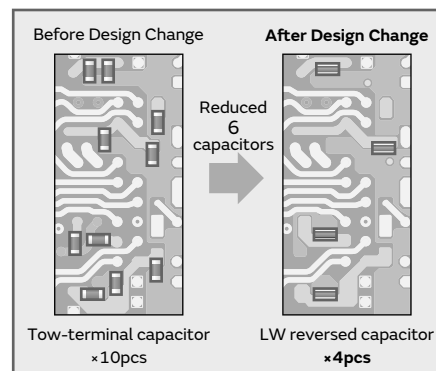


### 2 Contributes to a reduction in the number of components.

The number of components can be reduced by using low ESL capacitors, while maintaining functions equivalent to general purpose capacitors (GRM Series).

Murata proposes the use of the LLL series to reduce the number of components and high costs. Simulation is also possible.

Proposal for Cost Reductions

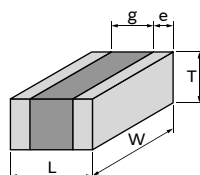


### 3 A maximum operating temperature up to 125°C

We also offer an abundant lineup of X7\* characteristics that can be used in high temperature locations, such as IC packages.

## Specifications

|                   |                               |
|-------------------|-------------------------------|
| Size (mm)         | 0.5×1.0mm to 1.6×3.2mm        |
| Rated Voltage     | 2.5Vdc to 50Vdc               |
| Capacitance       | 2200pF to 10μF                |
| Main Applications | Application processor/CPU/GPU |



<Dimensions>

This catalog contains only a portion of the product lineup.  
Please refer to the capacitor search tool on the Murata Web site for details.

## LLL Series High Dielectric Constant Type Part Number List

### 0.5×1.0mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |  |
|--------|---------------|---------|--------|------|--------------------|--|
| 0.35mm | 6.3Vdc        | X6S     | 0.10μF | ±20% | LLL153C80J104ME01# |  |
|        |               |         | 0.22μF | ±20% | LLL153C80J224ME14# |  |
|        | 4Vdc          | X7S     | 0.47μF | ±20% | LLL153C70G474ME17# |  |
|        |               | X6S     | 1.0μF  | ±20% | LLL153C80G105ME21# |  |

### 0.6×1.0mm

| T max. | Rated Voltage | TC Code | Cap.  | Tol. | Part Number        |           |
|--------|---------------|---------|-------|------|--------------------|-----------|
| 0.45mm | 4Vdc          | X5R     | 4.3μF | ±20% | LLL1U4R60G435ME22# | <b>D1</b> |

### 0.8×1.6mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 0.5mm  | 25Vdc         | X7R     | 10000pF | ±20% | LLL185R71E103MA11# |  |
|        | 16Vdc         | X7R     | 22000pF | ±20% | LLL185R71C223MA11# |  |
|        |               |         | 47000pF | ±20% | LLL185R71C473MA11# |  |
|        | 10Vdc         | X7R     | 0.10μF  | ±20% | LLL185R71A104MA11# |  |
|        | 4Vdc          | X7S     | 0.22μF  | ±20% | LLL185C70G224MA11# |  |
| 0.55mm | 4Vdc          | X7S     | 2.2μF   | ±20% | LLL185C70G225ME01# |  |
| 0.6mm  | 50Vdc         | X7R     | 2200pF  | ±20% | LLL185R71H222MA01# |  |
|        |               |         | 4700pF  | ±20% | LLL185R71H472MA01# |  |
|        | 25Vdc         | X7R     | 10000pF | ±20% | LLL185R71E103MA01# |  |
|        |               |         | 22000pF | ±20% | LLL185R71E223MA01# |  |
|        | 16Vdc         | X7R     | 47000pF | ±20% | LLL185R71C473MA01# |  |
|        | 10Vdc         | X7R     | 0.10μF  | ±20% | LLL185R71A104MA01# |  |
|        |               |         | 0.22μF  | ±20% | LLL185R71A224MA01# |  |
|        | 4Vdc          | X7S     | 0.47μF  | ±20% | LLL185C70G474MA01# |  |

### 1.25×2.0mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 0.5mm  | 50Vdc         | X7R     | 10000pF | ±20% | LLL215R71H103MA11# |  |
|        | 25Vdc         | X7R     | 22000pF | ±20% | LLL215R71E223MA11# |  |
|        | 16Vdc         | X7R     | 47000pF | ±20% | LLL215R71C473MA11# |  |
|        |               |         | 0.10μF  | ±20% | LLL215R71C104MA11# |  |
|        | 10Vdc         | X7R     | 0.22μF  | ±20% | LLL215R71A224MA11# |  |
|        | 6.3Vdc        | X7R     | 0.47μF  | ±20% | LLL215R70J474MA11# |  |
|        | 4Vdc          | X7S     | 1.0μF   | ±20% | LLL215C70G105MA11# |  |
| 0.7mm  | 50Vdc         | X7R     | 10000pF | ±20% | LLL216R71H103MA01# |  |
|        |               |         | 22000pF | ±20% | LLL216R71H223MA01# |  |
|        | 25Vdc         | X7R     | 47000pF | ±20% | LLL216R71E473MA01# |  |
|        |               |         | 0.10μF  | ±20% | LLL216R71E104MA01# |  |
|        | 10Vdc         | X7R     | 0.22μF  | ±20% | LLL216R71A224MA01# |  |
| 0.95mm | 16Vdc         | X7R     | 0.22μF  | ±20% | LLL219R71C224MA01# |  |
|        | 10Vdc         | X7R     | 0.47μF  | ±20% | LLL219R71A474MA01# |  |
|        |               |         | 1.0μF   | ±20% | LLL219R71A105MA01# |  |
|        | 4Vdc          | X7S     | 2.2μF   | ±20% | LLL219C70G225MA01# |  |

### 1.6×3.2mm

| T max. | Rated Voltage | TC Code | Cap.     | Tol. | Part Number        |  |
|--------|---------------|---------|----------|------|--------------------|--|
| 0.5mm  | 50Vdc         | X7R     | 10000pF  | ±20% | LLL315R71H103MA11# |  |
|        |               |         | 22000pF  | ±20% | LLL315R71H223MA11# |  |
|        | 25Vdc         | X7R     | 47000pF  | ±20% | LLL315R71E473MA11# |  |
|        |               |         | 0.10μF   | ±20% | LLL315R71E104MA11# |  |
|        | 16Vdc         | X7R     | 0.22μF   | ±20% | LLL315R71C224MA11# |  |
| 0.8mm  | 10Vdc         | X7R     | 0.47μF   | ±20% | LLL315R71A474MA11# |  |
|        | 50Vdc         | X7R     | 10000pF  | ±20% | LLL317R71H103MA01# |  |
|        |               |         | 22000pF  | ±20% | LLL317R71H223MA01# |  |
|        |               |         | 47000pF  | ±20% | LLL317R71H473MA01# |  |
|        | 25Vdc         | X7R     | 0.10μF   | ±20% | LLL317R71E104MA01# |  |
|        | 16Vdc         | X7R     | 0.22μF   | ±20% | LLL317R71C224MA01# |  |
|        |               |         | 0.47μF   | ±20% | LLL317R71C474MA01# |  |
|        | 10Vdc         | X7R     | 1.0μF    | ±20% | LLL317R71A105MA01# |  |
| 1.25mm | 6.3Vdc        | X7R     | 2.2μF    | ±20% | LLL317R70J225MA01# |  |
|        | 50Vdc         | X7R     | 0.10μF   | ±20% | LLL31MR71H104MA01# |  |
|        |               |         | 0.22μF   | ±20% | LLL31MR71E224MA01# |  |
|        |               |         | 0.47μF   | ±20% | LLL31MR71E474MA01# |  |
|        | 16Vdc         | X7R     | 1.0μF    | ±20% | LLL31MR71C105MA01# |  |
|        | 10Vdc         | X7R     | 2.2μF    | ±20% | LLL31MR71A225MA01# |  |
|        | 6.3Vdc        | X7R     | 4.7μF    | ±20% | LLL31MR70J475MA01# |  |
|        |               |         | X5R 10μF | ±20% | LLL31MR60J106ME01# |  |

## 10-Terminal Type Low ESL Monolithic Ceramic Capacitor

# LLM Series



Low  
ESL

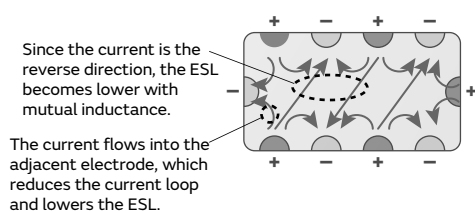
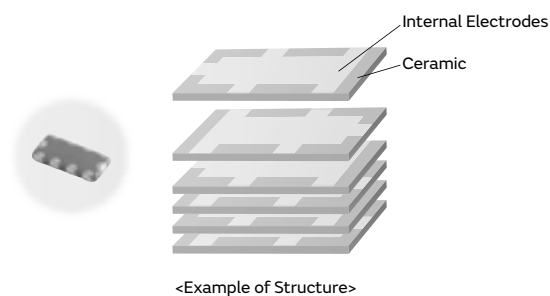


## 10-Terminal Type Low ESL Capacitor Ideal for Power Supply Decoupling of High-speed Operation IC

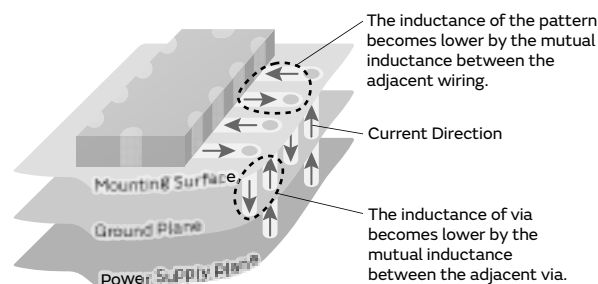
### Features

#### ① This is the lowest ESL LW reversed type capacitor.

Since the equivalent series inductance (ESL) of this product is even lower than the LLA series (8-terminal product) with excellent high frequency characteristics, this capacitor is ideal for power supply decoupling of high-speed operation IC.



<Effectiveness of Cancelling Out Inductance by Mutual Inductance>



<Effectiveness of Suppressing Inductance when Mounting a Multi-terminal Capacitor>

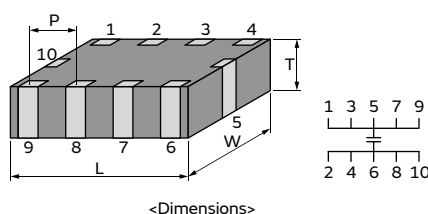
The inductance for the boards also becomes lower, not only the capacitor.

#### ② A maximum operating temperature up to 125°C

This product is applicable to high temperatures (X7\* characteristics); however, Murata also offers numerous thin type products, which are ideal as decoupling capacitors on IC package.

### Specifications

|                   |                               |
|-------------------|-------------------------------|
| Size (mm)         | 2.0×1.25mm to 3.2×1.6mm       |
| Rated Voltage     | 4Vdc to 16Vdc                 |
| Capacitance       | 0.10μF to 2.2μF               |
| Main Applications | Application processor/CPU/GPU |



This catalog contains only a portion of the product lineup.  
Please refer to the capacitor search tool on the Murata Web site for details.

## LLM Series High Dielectric Constant Type Part Number List

### 2.0×1.25mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |  |
|--------|---------------|---------|--------|------|--------------------|--|
| 0.55mm | 6.3Vdc        | X7R     | 0.22μF | ±20% | LLM215R70J224MA11# |  |
|        |               |         | 0.47μF | ±20% | LLM215R70J474MA11# |  |
|        | 4Vdc          | X7S     | 1.0μF  | ±20% | LLM215C70G105MA11# |  |

### 3.2×1.6mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |  |
|--------|---------------|---------|--------|------|--------------------|--|
| 0.55mm | 16Vdc         | X7R     | 0.10μF | ±20% | LLM315R71C104MA11# |  |
|        |               |         | 0.22μF | ±20% | LLM315R71C224MA11# |  |
|        | 10Vdc         | X7R     | 0.47μF | ±20% | LLM315R71A474MA11# |  |
|        | 6.3Vdc        | X7R     | 2.2μF  | ±20% | LLM315R70J225MA11# |  |

GRM Series

GJM Series

GMA Series

GMD Series

GQM Series

GR3 Series

GRJ Series

LLA Series

LLL Series

LLM Series

LLR Series

KRM Series

KR3 Series

NFM Series

GCH Series

⚠Caution/  
Notice

## ESR Controlled Type Low ESL Monolithic Ceramic Capacitors

# LLR Series

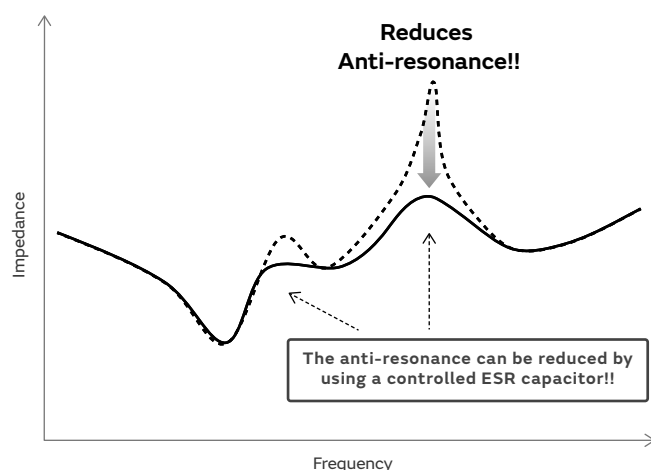


## ESR Controlled Type Low ESL Capacitors Equipped with Anti-resonance Control Function

### Features

#### ① Reduces Anti-resonance

This capacitor is controlled so that the equivalent series resistance (ESR) becomes slightly higher, and is effective in reducing the anti-resonance that occurs when capacitor arrays are used.



#### ② Lineup of capacitors with ESR values from 100-1,000mΩ.

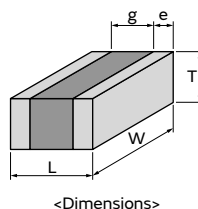
According to the conditions of the anti-resonance, the most suitable ESR value can be selected from 4 types.

#### ③ Low ESL

This ESR controlled type capacitor has excellent high frequency characteristics, with low equivalent series inductance (ESL). This is also ideal as a decoupling component.

### Specifications

|                   |                             |
|-------------------|-----------------------------|
| Size (mm)         | 0.8×1.6mm                   |
| Rated Voltage     | 4Vdc                        |
| Capacitance       | 1.0μF                       |
| Main Applications | Network processor/ASIC/PMIC |



This catalog contains only a portion of the product lineup.  
Please refer to the capacitor search tool on the Murata Web site for details.

## LLR Series High Dielectric Constant Type Part Number List

0.8×1.6mm

| T max. | Rated Voltage | TC Code | Cap.  | Tol. | Part Number        |  |
|--------|---------------|---------|-------|------|--------------------|--|
| 0.55mm | 4Vdc          | X7S     | 1.0μF | ±20% | LLR185C70G105ME01# |  |
|        |               |         |       | ±20% | LLR185C70G105ME03# |  |
|        |               |         |       | ±20% | LLR185C70G105ME05# |  |
|        |               |         |       | ±20% | LLR185C70G105ME07# |  |

GRM Series

GJM Series

GMA Series

GMD Series

GQM Series

GR3 Series

GRJ Series

LLA Series

LLL Series

LLM Series

LLP Series

KRM Series

KR3 Series

NFM Series

GCH Series

Caution/  
Notice

## Metal terminal type monolithic ceramic capacitors

# KRM Series



Anti-noise

Deflecting crack

Soldering crack

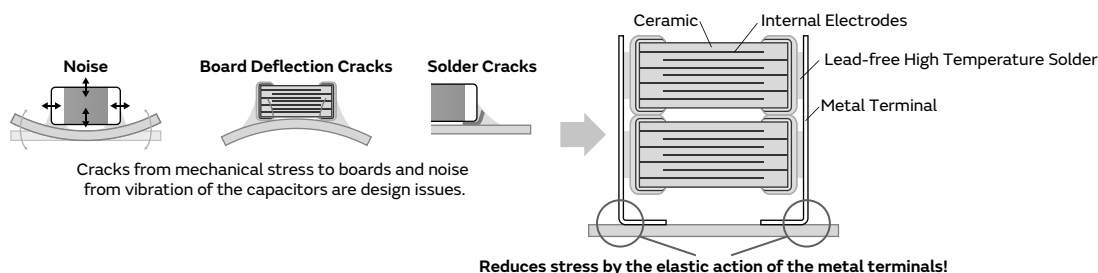
WEB

## Bonding the metal terminals to external electrodes solves design issues by mounting large size MLCC!

### Features

#### ① Bond metal terminals to the external electrodes of chips.

The stress applied to the chip is relieved by the elastic action of the metal terminal.

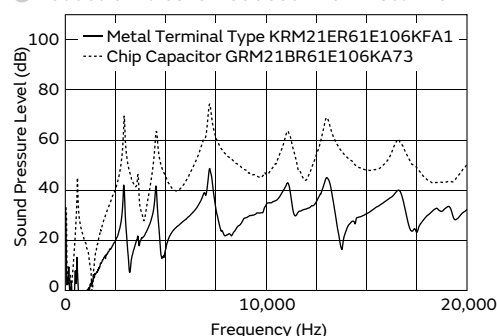


#### ② Substantially reduces noise, board deflection cracks and soldering cracks.

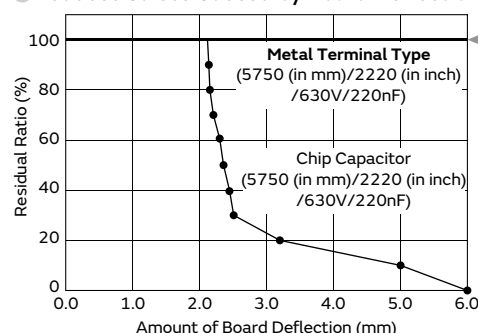
This product is not damaged even with a board deflection of 6 mm.

Solder cracks do not occur even with 2,000 cycles of heat stress.

##### ● Acoustic Noise is Reduced with Metal Terminals



##### ● Reduces Stress Caused by Board Deflection



No damage, even with 6 mm board deflection!!

##### ● Suppresses Solder Cracks Caused by Heat Stress

| Chip Size  | Chip Only<br>(5750 (in mm)/2220 (in inch) size) | Metal Terminal Type<br>(5750 (in mm)/2220 (in inch) size) |
|------------|-------------------------------------------------|-----------------------------------------------------------|
| 1000 Cycle | <br>↑Solder Crack                               | <br>↑Solder Crack                                         |
| 2000 Cycle | <br>↑Solder Crack                               | <br>↑Solder Crack                                         |

Compared with chips only, this product is excellent in solder cracking resistance.

Test Condition: -55 to +125°C, 5min.,(Liquid Phase)

Board Used: Glass Epoxy Board (FR-4)

Demonstrates replacement value of low noise capacitors Experience the effectiveness of the KRM Series.

Examples of Noise Countermeasures

WEB

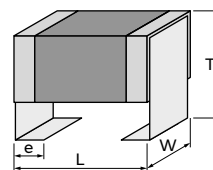
### ③ 2 chips can be stacked.

Realize large capacity by stacking 2 capacitors.

## Specifications

|                   |                                                         |
|-------------------|---------------------------------------------------------|
| Size (mm)         | 2.2×1.25mm to 6.1×5.3mm                                 |
| Rated Voltage     | 16Vdc to 1000Vdc                                        |
| Capacitance       | 68000pF to 68μF                                         |
| Main Applications | For smoothing and noise suppression of DC-DC converters |

This catalog contains only a portion of the product lineup.  
 Please refer to the capacitor search tool on the Murata Web site for details.



<Dimensions>

## KRM Series High Dielectric Constant Type Anti-noise Deflecting crack Soldering crack Part Number List

### 2.2×1.25mm

| T max. | Rated Voltage | TC Code | Cap. | Tol. | Part Number        |           |
|--------|---------------|---------|------|------|--------------------|-----------|
| 1.9mm  | 25Vdc         | X5R     | 10μF | ±10% | KRM21ER61E106KFA1# |           |
|        | 16Vdc         | X5R     | 10μF | ±10% | KRM21ER61C106KFA1# |           |
| 2.0mm  | 25Vdc         | X7S     | 10μF | ±10% | KRM21FC71E106KFA1# | <b>D1</b> |
|        |               | X6S     | 10μF | ±10% | KRM21FC81E106KFA1# | <b>D1</b> |
|        |               | X5R     | 22μF | ±20% | KRM21FR61E226MFA1# |           |

### 3.5×1.7mm

| T max. | Rated Voltage | TC Code | Cap.  | Tol. | Part Number        |  |
|--------|---------------|---------|-------|------|--------------------|--|
| 2.0mm  | 25Vdc         | X5R     | 10μF  | ±10% | KRM31FR61E106KH01# |  |
| 2.9mm  | 100Vdc        | X7R     | 1.0μF | ±10% | KRM31KR72A105KH01# |  |
|        | 50Vdc         | X7R     | 4.7μF | ±10% | KRM31KR71H475KH01# |  |
|        | 35Vdc         | X6S     | 10μF  | ±10% | KRM31KC8YA106KH01# |  |
|        | 25Vdc         | X6S     | 10μF  | ±10% | KRM31KC81E106KH01# |  |

### 3.6×1.7mm

| T max. | Rated Voltage | TC Code | Cap.  | Tol. | Part Number        |  |
|--------|---------------|---------|-------|------|--------------------|--|
| 2.9mm  | 50Vdc         | X7R     | 2.2μF | ±10% | KRM31KR71H225KH01# |  |

### 3.7×1.85mm

| T max. | Rated Voltage | TC Code | Cap.  | Tol. | Part Number        |  |
|--------|---------------|---------|-------|------|--------------------|--|
| 2.9mm  | 100Vdc        | X7R     | 2.2μF | ±10% | KRM31KR72A225KH01# |  |

### 6.1×5.3mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 3.0mm  | 1000Vdc       | X7R     | 68000pF | ±10% | KRM55LR73A683KH01# |  |
|        |               |         | 0.10μF  | ±10% | KRM55LR73A104KH01# |  |
|        | 630Vdc        | X7R     | 0.15μF  | ±10% | KRM55LR72J154KH01# |  |
|        |               |         | 0.22μF  | ±10% | KRM55LR72J224KH01# |  |
|        | 250Vdc        | X7R     | 0.68μF  | ±10% | KRM55LR72E684KH01# |  |
|        |               |         | 1.0μF   | ±10% | KRM55LR72E105KH01# |  |
|        | 100Vdc        | X7R     | 4.7μF   | ±10% | KRM55LR72A475KH01# |  |
|        | 63Vdc         | X7R     | 4.7μF   | ±10% | KRM55LR71J475KH01# |  |
|        | 50Vdc         | X7R     | 4.7μF   | ±10% | KRM55LR71H475KH01# |  |
|        |               |         | 10μF    | ±10% | KRM55LR71H106KH01# |  |
|        | 35Vdc         | X7R     | 10μF    | ±10% | KRM55LR7YA106KH01# |  |
|        |               |         | 15μF    | ±10% | KRM55LR7YA156KH01# |  |
| 3.9mm  | 25Vdc         | X7R     | 15μF    | ±10% | KRM55LR71E156KH01# |  |
|        | 100Vdc        | X7R     | 6.8μF   | ±10% | KRM55QR72A685KH01# |  |
|        |               |         | 10μF    | ±10% | KRM55QR72A106KH01# |  |
|        | 63Vdc         | X7R     | 10μF    | ±10% | KRM55QR71J106KH01# |  |
|        | 50Vdc         | X7R     | 17μF    | ±10% | KRM55QR71H176KH01# |  |
|        | 35Vdc         | X7R     | 17μF    | ±10% | KRM55QR7YA176KH01# |  |
|        |               |         | 22μF    | ±10% | KRM55QR7YA226KH01# |  |
|        | 25Vdc         | X7R     | 22μF    | ±10% | KRM55QR71E226KH01# |  |

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |  |
|--------|---------------|---------|--------|------|--------------------|--|
| 3.9mm  | 25Vdc         | X7R     | 33μF   | ±10% | KRM55QR71E336KH01# |  |
| 5.0mm  | 1000Vdc       | X7R     | 0.15μF | ±20% | KRM55TR73A154MH01# |  |
|        |               |         | 0.22μF | ±20% | KRM55TR73A224MH01# |  |
|        | 630Vdc        | X7R     | 0.33μF | ±20% | KRM55TR72J334MH01# |  |
|        |               |         | 0.47μF | ±20% | KRM55TR72J474MH01# |  |
|        | 250Vdc        | X7R     | 1.5μF  | ±20% | KRM55TR72E155MH01# |  |
|        |               |         | 2.2μF  | ±20% | KRM55TR72E225MH01# |  |
|        | 100Vdc        | X7R     | 10μF   | ±20% | KRM55TR72A106MH01# |  |
|        | 50Vdc         | X7R     | 22μF   | ±20% | KRM55TR71H226MH01# |  |
|        | 35Vdc         | X7R     | 22μF   | ±20% | KRM55TR7YA226MH01# |  |
|        |               |         | 33μF   | ±20% | KRM55TR7YA336MH01# |  |
| 6.7mm  | 25Vdc         | X7R     | 33μF   | ±20% | KRM55TR71E336MH01# |  |
|        |               |         | 15μF   | ±20% | KRM55WR72A156MH01# |  |
|        | 100Vdc        | X7R     | 22μF   | ±20% | KRM55WR72A226MH01# |  |
|        |               |         | 15μF   | ±20% | KRM55WR72A156MH01# |  |
|        | 63Vdc         | X7R     | 22μF   | ±20% | KRM55WR71J226MH01# |  |
|        | 50Vdc         | X7R     | 33μF   | ±20% | KRM55WR71H336MH01# |  |
|        | 35Vdc         | X7R     | 47μF   | ±20% | KRM55WR7YA476MH01# |  |
|        | 25Vdc         | X7R     | 47μF   | ±20% | KRM55WR71E476MH01# |  |
|        |               |         | 68μF   | ±20% | KRM55WR71E686MH01# |  |

Part number # indicates the package specification code.

High Effective Capacitance & High Allowable Ripple Current Metal Terminal Type Monolithic Ceramic Capacitor

## KR3 Series



Anti-noise

Deflecting crack

Soldering crack

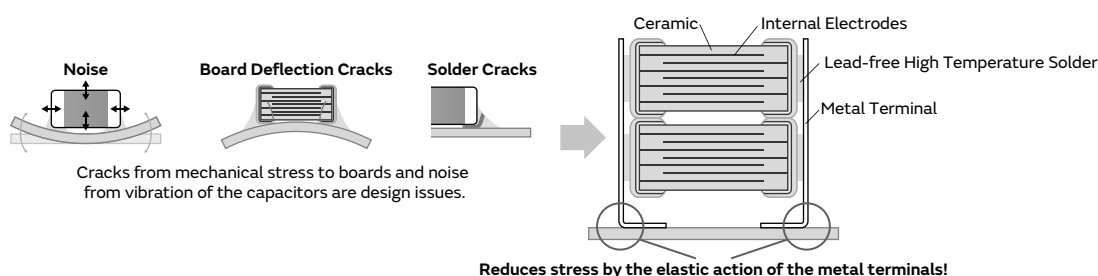
WEB

**Bonding the metal terminals to external electrodes solves design issues by mounting large size MLCC!**

### Features

#### ① Bond Metal Terminals to External Electrodes of Chips

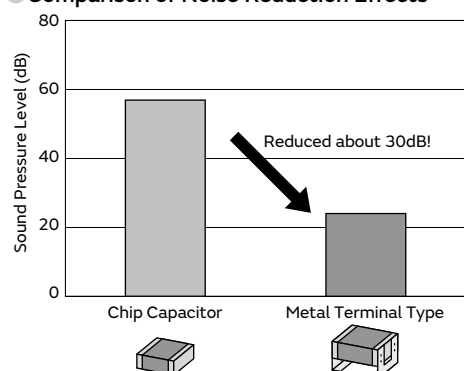
This product has high resistance to heat and mechanical impact and greatly reduces acoustic noise of boards by ceramics.



#### ② Stacking of Chips

Achieve high capacity by stacking 2 capacitors.

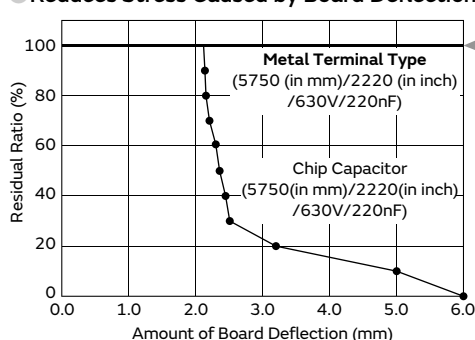
##### ● Comparison of Noise Reduction Effects



Evaluation Items: 5750 (in mm)/2220 (in inch) size/DC630V/220nF  
Test Method: DC50V, AC10Vp-p/3kHz  
Test Board: Glass Epoxy Board (T: 1.6mm)  
Test Quantity: 3pc  
Distance Between Microphone and Board: 3mm

Note: Results Using Murata's Evaluation Board

##### ● Reduces Stress Caused by Board Deflection



No damage, even with 6 mm board deflection!!

##### ● Suppresses Solder Cracks Caused by Heat Stress

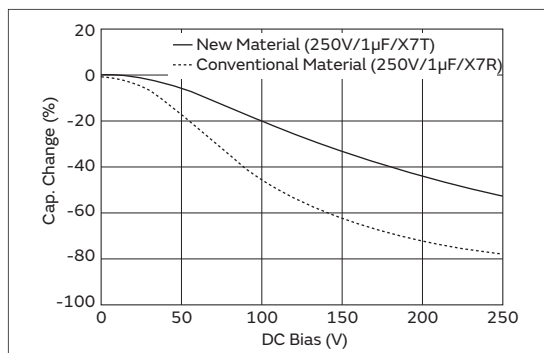
| Chip Size  | Chip Only<br>(5750 (in mm)/2220 (in inch) size) |  | Metal Terminal Type<br>(5750 (in mm)/2220 (in inch) size) |  |
|------------|-------------------------------------------------|--|-----------------------------------------------------------|--|
| 1000 Cycle |                                                 |  |                                                           |  |
| 2000 Cycle |                                                 |  |                                                           |  |

Compared with chips only, this product is excellent in solder cracking resistance.

Test Condition: -55 to +125°C, 5min., (Liquid Phase)  
Board Used: Glass Epoxy Board (FR-4)

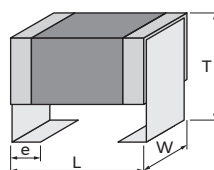
### 3 Adopted Low Dielectric Constant Materials

Improved effective capacity and ripple resistant performance, compared to conventional products (X7R characteristics).



### Specifications

|                   |                                                      |
|-------------------|------------------------------------------------------|
| Size (mm)         | 6.1×5.3mm                                            |
| Rated Voltage     | 250Vdc to 630Vdc                                     |
| Capacitance       | 0.10μF to 2.2μF                                      |
| Main Applications | For DC-DC converters of general electronic equipment |



<Dimensions>

This catalog contains only a portion of the product lineup.  
 Please refer to the capacitor search tool on the Murata Web site for details.

# KR3 Series High Dielectric Constant Type Part Number List

## 6.1×5.3mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |  |
|--------|---------------|---------|--------|------|--------------------|--|
| 3.0mm  | 630Vdc        | X7T     | 0.10μF | ±10% | KR355LD72J104KH01# |  |
|        |               |         | 0.15μF | ±10% | KR355LD72J154KH01# |  |
|        | 450Vdc        | X7T     | 0.22μF | ±10% | KR355LD72W224KH01# |  |
|        |               |         | 0.33μF | ±10% | KR355LD72W334KH01# |  |
|        |               |         | 0.47μF | ±10% | KR355LD72W474KH01# |  |
|        | 250Vdc        | X7T     | 0.47μF | ±10% | KR355LD72E474KH01# |  |
|        |               |         | 0.68μF | ±10% | KR355LD72E684KH01# |  |
| 3.9mm  | 630Vdc        | X7T     | 0.22μF | ±10% | KR355QD72J224KH01# |  |
|        |               |         | 0.27μF | ±10% | KR355QD72J274KH01# |  |
|        | 450Vdc        | X7T     | 0.56μF | ±10% | KR355QD72W564KH01# |  |
|        | 250Vdc        | X7T     | 1.0μF  | ±10% | KR355QD72E105KH01# |  |
| 5.0mm  | 450Vdc        | X7T     | 0.68μF | ±20% | KR355TD72W684MH01# |  |
|        |               |         | 1.0μF  | ±20% | KR355TD72W105MH01# |  |
|        | 250Vdc        | X7T     | 1.5μF  | ±20% | KR355TD72E155MH01# |  |
| 6.7mm  | 630Vdc        | X7T     | 0.47μF | ±20% | KR355WD72J474MH01# |  |
|        |               |         | 0.56μF | ±20% | KR355WD72J564MH01# |  |
|        | 450Vdc        | X7T     | 1.2μF  | ±20% | KR355WD72W125MH01# |  |
|        | 250Vdc        | X7T     | 2.2μF  | ±20% | KR355WD72E225MH01# |  |

GRM Series  
GJM Series  
GMA Series  
GMD Series  
GQM Series  
GR3 Series  
GRJ Series  
LLA Series  
LLL Series  
LLM Series  
LLR Series  
KRM Series  
KR3 Series  
NFM Series  
GCH Series  
Caution/Notice

## 3 Terminal Low ESL Monolithic Ceramic Capacitors

# NFM Series



This is the most suitable Low ESL capacitors for noise measurement and power decoupling of highspeed electrical devices.

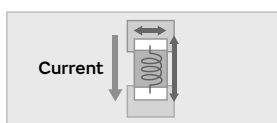
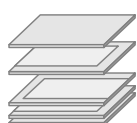
## Features

### 1 Low ESL

Since the equivalent series inductance (ESL) is low and excellent in high frequency characteristics, this capacitor is suitable for power supply decoupling of high-speed operation electronic equipment.

#### • 2-terminal Capacitor

Realizes Ultra low ESL by using a extremely shorter high frequency current path



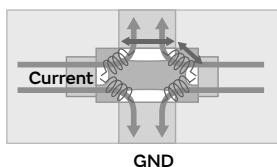
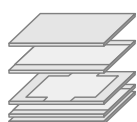
HOT

× long current distance

GND

× Narrow wiring width

#### • 3-terminal capacitor



HOT

○ Short current distance

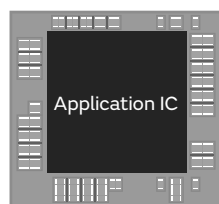
○ Wide wiring width

○ Four routes formed in parallel

### 2 Contributes to a reduction in the number of components.

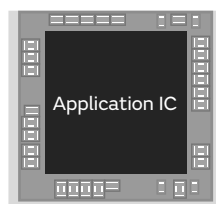
The number of components can be reduced by using low ESL capacitors, while maintaining functions equivalent to general purpose capacitors (GRM Series).

#### Before



2-terminal capacitor  
100pcs

#### After



3-terminal capacitor  
32pcs

Reduction of  
68 components

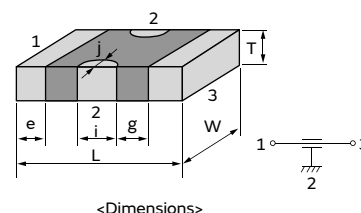
### 3 Contributes to noise suppression

Example of noise suppression effect



## Specifications

|                   |                                                              |
|-------------------|--------------------------------------------------------------|
| Size (mm)         | 1.0×0.5mm to 4.5×1.6mm                                       |
| Rated Voltage     | 2.5Vdc to 100Vdc                                             |
| Capacitance       | 100pF to 27μF                                                |
| Main Applications | For decoupling and smoothing circuits, For noise suppression |



## NFM Series Part Number List

### 1.0×0.5mm

| T max. | Rated Voltage | Cap.    | Tol.   | Part Number     |  |
|--------|---------------|---------|--------|-----------------|--|
| 0.35mm | 6.3Vdc        | 0.47μF  | ±20%   | NFM15PC474R0J3# |  |
|        | 4Vdc          | 0.47μF  | ±20%   | NFM15PC474D0G3# |  |
|        |               | 1.0μF   | ±20%   | NFM15PC105R0G3# |  |
| 0.5mm  | 16Vdc         | 2200pF  | ±20%   | NFM15CC222D1C3# |  |
|        |               | 22000pF | ±20%   | NFM15CC223C1C3# |  |
|        |               | 47000pF | ±20%   | NFM15PC473C1C3# |  |
|        | 10Vdc         | 2200pF  | ±20%   | NFM15CC222D1A3# |  |
|        |               | 22000pF | ±20%   | NFM15CC223C1A3# |  |
|        |               | 47000pF | ±20%   | NFM15PC473C1A3# |  |
|        |               | 0.10μF  | ±20%   | NFM15PC104R1A3# |  |
|        |               | 0.22μF  | ±20%   | NFM15PC224R1A3# |  |
|        |               | 6.3Vdc  | 0.10μF | NFM15PC104D0J3# |  |
|        |               |         | 0.22μF | NFM15PC224D0J3# |  |
|        | 2.5Vdc        | 4.3μF   | ±20%   | NFM15PC435R0E3# |  |
| 0.65mm | 2.5Vdc        | 7.5μF   | ±20%   | NFM15PC755R0E3# |  |
| 0.7mm  | 2.5Vdc        | 9.1μF   | ±20%   | NFM15PC915R0E3# |  |

### 1.6×0.8mm

| T max. | Rated Voltage | Cap.    | Tol.   | Part Number     |  |
|--------|---------------|---------|--------|-----------------|--|
| 0.7mm  | 16Vdc         | 100pF   | ±20%   | NFM18CC101R1C3# |  |
|        |               | 220pF   | ±20%   | NFM18CC221R1C3# |  |
|        |               | 470pF   | ±20%   | NFM18CC471R1C3# |  |
|        |               | 1000pF  | ±20%   | NFM18CC102R1C3# |  |
|        |               | 2200pF  | ±20%   | NFM18CC222R1C3# |  |
|        |               | 22000pF | ±20%   | NFM18CC223R1C3# |  |
|        |               | 0.10μF  | ±20%   | NFM18PC104R1C3# |  |
|        |               | 6.3Vdc  | 0.22μF | NFM18PC224R0J3# |  |
|        |               |         | 0.47μF | NFM18PC474R0J3# |  |
|        |               |         | ±20%   | NFM18PS474R0J3# |  |
|        |               | 1.0μF   | ±20%   | NFM18PS105D0J3# |  |
|        |               |         | ±20%   | NFM18PS105R0J3# |  |
|        |               | 2.2μF   | ±20%   | NFM18PC225B0J3# |  |
| 0.9mm  | 10Vdc         | 2.2μF   | ±20%   | NFM18PC225B1A3# |  |
|        | 6.3Vdc        | 1.0μF   | ±20%   | NFM18PC105R0J3# |  |

### 2.0×1.25mm

| T max. | Rated Voltage | Cap.    | Tol. | Part Number     |  |
|--------|---------------|---------|------|-----------------|--|
| 0.95mm | 50Vdc         | 220pF   | ±20% | NFM21CC221R1H3# |  |
|        |               | 470pF   | ±20% | NFM21CC471R1H3# |  |
|        |               | 1000pF  | ±20% | NFM21CC102R1H3# |  |
|        |               | 2200pF  | ±20% | NFM21CC222R1H3# |  |
|        |               | 22000pF | ±20% | NFM21CC223R1H3# |  |
|        | 25Vdc         | 0.10μF  | ±20% | NFM21PC104R1E3# |  |
|        | 16Vdc         | 0.22μF  | ±20% | NFM21PC224R1C3# |  |
|        |               | 0.47μF  | ±20% | NFM21PC474R1C3# |  |
|        |               | 1.0μF   | ±20% | NFM21PC105B1C3# |  |
|        | 10Vdc         | 1.0μF   | ±20% | NFM21PC105B1A3# |  |
|        |               | 4.7μF   | ±20% | NFM21PC475B1A3# |  |

| T max. | Rated Voltage | Cap.  | Tol. | Part Number     |  |
|--------|---------------|-------|------|-----------------|--|
| 0.95mm | 6.3Vdc        | 2.2μF | ±20% | NFM21PC225B0J3# |  |
|        |               | 10μF  | ±20% | NFM21PS106B0J3# |  |

### 3.2×1.25mm

| T max. | Rated Voltage | Cap.    | Tol.     | Part Number     |           |
|--------|---------------|---------|----------|-----------------|-----------|
| 0.9mm  | 50Vdc         | 220pF   | +50/-20% | NFM3DCC221R1H3# |           |
|        |               | 470pF   | +50/-20% | NFM3DCC471R1H3# |           |
|        |               | 1000pF  | +50/-20% | NFM3DCC102R1H3# |           |
|        |               | 2200pF  | +50/-20% | NFM3DCC222R1H3# |           |
|        |               | 22000pF | +50/-20% | NFM3DCC223R1H3# |           |
|        |               |         | ±20%     | NFM3DPC223R1H3# | <b>D3</b> |

### 3.2×1.6mm

| T max. | Rated Voltage | Cap.    | Tol. | Part Number     |           |
|--------|---------------|---------|------|-----------------|-----------|
| 1.5mm  | 100Vdc        | 10000pF | ±20% | NFM31KC103R2A3# | <b>D3</b> |
|        |               | 15000pF | ±20% | NFM31KC153R2A3# |           |
|        |               | 22000pF | ±20% | NFM31KC223R2A3# |           |
|        |               | 0.10μF  | ±20% | NFM31KC104R2A3# |           |
|        | 50Vdc         | 10000pF | ±20% | NFM31KC103R1H3# | <b>D3</b> |
|        |               | 15000pF | ±20% | NFM31KC153R1H3# | <b>D3</b> |
|        |               | 22000pF | ±20% | NFM31KC223R1H3# | <b>D3</b> |
|        |               | 0.10μF  | ±20% | NFM31KC104R1H3# |           |
|        | 6.3Vdc        | 27μF    | ±20% | NFM31PC276B0J3# |           |

### 4.5×1.6mm

| T max. | Rated Voltage | Cap.    | Tol.     | Part Number     |  |
|--------|---------------|---------|----------|-----------------|--|
| 1.2mm  | 100Vdc        | 470pF   | +50/-20% | NFM41CC471R2A3# |  |
|        |               | 1000pF  | +50/-20% | NFM41CC102R2A3# |  |
|        |               | 2200pF  | +50/-20% | NFM41CC222R2A3# |  |
|        |               | 22000pF | +50/-20% | NFM41CC223R2A3# |  |
|        | 50Vdc         | 0.20μF  | +80/-20% | NFM41PC204F1H3# |  |
|        |               | 1.5μF   | ±20%     | NFM41PC155B1H3# |  |
|        | 25Vdc         | 1.5μF   | ±20%     | NFM41PC155B1E3# |  |

## Monolithic Ceramic Capacitors for implanted Medical Devices

# GCH Series



**These medical-grade monolithic ceramic capacitors are suitable for use in non-critical circuits of implanted medical devices such as cardiac pacemakers.**

### Features

#### ① Ideal for use in implanted medical devices (non-critical circuits\*)

These capacitors are suitable for use in non-critical circuits of implanted medical devices such as cardiac pacemakers, implanted diagnostic devices, implanted rehabilitation devices and implanted nerve stimulation devices.

They were developed based on high-reliability capacitor design technology, quality control, and process management know-how amassed by Murata in the development of markets requiring high reliability, such as the automotive market.

As verified by reliability testing including heat cycle and humidity-resistance load tests, they are guaranteed to withstand more severe conditions than our general-purpose (GRM series) capacitors.

##### \* Non-critical circuits

This term refers to circuits in implanted medical devices that are not directly linked to life support, i.e., circuits that will not directly endanger the life of the patient should the functionality of the device be reduced or halted by failure of the circuit.

In the case of cardiac pacemakers, circuits that are not directly linked to life support would be considered non-critical circuits.

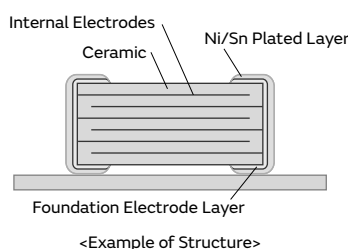
Murata also produces a series of capacitors (the GCR series) suitable for critical circuits linked to life support. Please contact your Murata sales representative for details.

You can also contact us via our website.

#### ② Individual management and inspection available upon request.

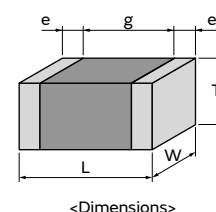
Individual management, such as appearance inspections or verification of various characteristics, can be performed upon request.

#### ③ Sn plating is applied to the external electrodes; excellent solderability.



### Specifications

|                   |                                                                                                                                                                                       |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Size (mm)         | 1.0×0.5mm to 3.2×2.5mm                                                                                                                                                                |
| Rated Voltage     | 6.3Vdc to 100Vdc                                                                                                                                                                      |
| Capacitance       | 1.0pF to 47μF                                                                                                                                                                         |
| Main Applications | Non-critical circuits of Implanted medical devices such as cardiac pacemakers, Implanted diagnostic devices, Implanted rehabilitation devices and Implanted nerve stimulation devices |



This catalog contains only a portion of the product lineup.  
Please refer to the capacitor search tool on the Murata Web site for details.

# GCH Series Temperature Compensating Type Part Number List

## 1.0×0.5mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |  |
|--------|---------------|---------|--------|---------|--------------------|--|
| 0.55mm | 50Vdc         | COG     | 1.0pF  | ±0.25pF | GCH1555C1H1R0CE01# |  |
|        |               |         | 2.0pF  | ±0.25pF | GCH1555C1H2R0CE01# |  |
|        |               |         | 3.0pF  | ±0.25pF | GCH1555C1H3R0CE01# |  |
|        |               |         | 4.0pF  | ±0.25pF | GCH1555C1H4R0CE01# |  |
|        |               |         | 5.0pF  | ±0.25pF | GCH1555C1H5R0CE01# |  |
|        |               |         | 6.0pF  | ±0.5pF  | GCH1555C1H6R0DE01# |  |
|        |               |         | 7.0pF  | ±0.5pF  | GCH1555C1H7R0DE01# |  |
|        |               |         | 8.0pF  | ±0.5pF  | GCH1555C1H8R0DE01# |  |
|        |               |         | 9.0pF  | ±0.5pF  | GCH1555C1H9R0DE01# |  |
|        |               |         | 10pF   | ±5%     | GCH1555C1H100JE01# |  |
|        |               |         | 15pF   | ±5%     | GCH1555C1H150JE01# |  |
|        |               |         | 22pF   | ±5%     | GCH1555C1H220JE01# |  |
|        |               |         | 33pF   | ±5%     | GCH1555C1H330JE01# |  |
|        |               |         | 47pF   | ±5%     | GCH1555C1H470JE01# |  |
|        |               |         | 68pF   | ±5%     | GCH1555C1H680JE01# |  |
|        |               |         | 100pF  | ±5%     | GCH1555C1H101JE01# |  |
|        |               |         | 150pF  | ±5%     | GCH1555C1H151JE01# |  |
|        |               |         | 220pF  | ±5%     | GCH1555C1H221JE01# |  |
|        |               |         | 330pF  | ±5%     | GCH1555C1H331JE01# |  |
|        |               |         | 470pF  | ±5%     | GCH1555C1H471JE01# |  |
|        |               |         | 1000pF | ±5%     | GCH1555C1H102JE01# |  |

## 1.6×0.8mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |  |
|--------|---------------|---------|--------|---------|--------------------|--|
| 0.9mm  | 100Vdc        | COG     | 1.0pF  | ±0.25pF | GCH1885C2A1R0CE01# |  |
|        |               |         | 2.0pF  | ±0.25pF | GCH1885C2A2R0CE01# |  |
|        |               |         | 3.0pF  | ±0.25pF | GCH1885C2A3R0CE01# |  |
|        |               |         | 4.0pF  | ±0.25pF | GCH1885C2A4R0CE01# |  |
|        |               |         | 5.0pF  | ±0.25pF | GCH1885C2A5R0CE01# |  |
|        |               |         | 6.0pF  | ±0.5pF  | GCH1885C2A6R0DE01# |  |
|        |               |         | 7.0pF  | ±0.5pF  | GCH1885C2A7R0DE01# |  |
|        |               |         | 8.0pF  | ±0.5pF  | GCH1885C2A8R0DE01# |  |
|        |               |         | 9.0pF  | ±0.5pF  | GCH1885C2A9R0DE01# |  |
|        |               |         | 10pF   | ±5%     | GCH1885C2A100JE01# |  |
|        |               |         | 15pF   | ±5%     | GCH1885C2A150JE01# |  |
|        |               |         | 22pF   | ±5%     | GCH1885C2A220JE01# |  |
|        |               |         | 33pF   | ±5%     | GCH1885C2A330JE01# |  |
|        |               |         | 47pF   | ±5%     | GCH1885C2A470JE01# |  |
|        |               |         | 68pF   | ±5%     | GCH1885C2A680JE01# |  |
|        |               |         | 100pF  | ±5%     | GCH1885C2A101JE01# |  |
|        |               |         | 150pF  | ±5%     | GCH1885C2A151JE01# |  |
|        |               |         | 220pF  | ±5%     | GCH1885C2A221JE01# |  |
|        |               |         | 330pF  | ±5%     | GCH1885C2A331JE01# |  |
|        |               |         | 470pF  | ±5%     | GCH1885C2A471JE01# |  |
|        |               |         | 680pF  | ±5%     | GCH1885C2A681JE01# |  |
|        |               |         | 1000pF | ±5%     | GCH1885C2A102JE01# |  |
|        |               |         | 1500pF | ±5%     | GCH1885C2A152JE01# |  |
|        | 50Vdc         | COG     | 1.0pF  | ±0.25pF | GCH1885C1H1R0CE01# |  |
|        |               |         | 2.0pF  | ±0.25pF | GCH1885C1H2R0CE01# |  |
|        |               |         | 3.0pF  | ±0.25pF | GCH1885C1H3R0CE01# |  |

| T max. | Rated Voltage | TC Code | Cap.   | Tol.    | Part Number        |  |
|--------|---------------|---------|--------|---------|--------------------|--|
| 0.9mm  | 50Vdc         | COG     | 4.0pF  | ±0.25pF | GCH1885C1H4R0CE01# |  |
|        |               |         | 5.0pF  | ±0.25pF | GCH1885C1H5R0CE01# |  |
|        |               |         | 6.0pF  | ±0.5pF  | GCH1885C1H6R0DE01# |  |
|        |               |         | 7.0pF  | ±0.5pF  | GCH1885C1H7R0DE01# |  |
|        |               |         | 8.0pF  | ±0.5pF  | GCH1885C1H8R0DE01# |  |
|        |               |         | 9.0pF  | ±0.5pF  | GCH1885C1H9R0DE01# |  |
|        |               |         | 10pF   | ±5%     | GCH1885C1H100JE01# |  |
|        |               |         | 15pF   | ±5%     | GCH1885C1H150JE01# |  |
|        |               |         | 22pF   | ±5%     | GCH1885C1H220JE01# |  |
|        |               |         | 33pF   | ±5%     | GCH1885C1H330JE01# |  |
|        |               |         | 47pF   | ±5%     | GCH1885C1H470JE01# |  |
|        |               |         | 68pF   | ±5%     | GCH1885C1H680JE01# |  |
|        |               |         | 100pF  | ±5%     | GCH1885C1H101JE01# |  |
|        |               |         | 150pF  | ±5%     | GCH1885C1H151JE01# |  |
|        |               |         | 220pF  | ±5%     | GCH1885C1H221JE01# |  |
|        |               |         | 330pF  | ±5%     | GCH1885C1H331JE01# |  |
|        |               |         | 470pF  | ±5%     | GCH1885C1H471JE01# |  |
|        |               |         | 680pF  | ±5%     | GCH1885C1H681JE01# |  |
|        |               |         | 1000pF | ±5%     | GCH1885C1H102JE01# |  |
|        |               |         | 1500pF | ±5%     | GCH1885C1H152JE01# |  |
|        |               |         | 2200pF | ±5%     | GCH1885C1H222JE01# |  |
|        |               |         | 3300pF | ±5%     | GCH1885C1H332JE01# |  |

## 2.0×1.25mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 0.7mm  | 100Vdc        | COG     | 100pF   | ±5%  | GCH2165C2A101JE01# |  |
|        |               |         | 150pF   | ±5%  | GCH2165C2A151JE01# |  |
|        |               |         | 220pF   | ±5%  | GCH2165C2A221JE01# |  |
|        |               |         | 330pF   | ±5%  | GCH2165C2A331JE01# |  |
|        |               |         | 470pF   | ±5%  | GCH2165C2A471JE01# |  |
|        |               |         | 680pF   | ±5%  | GCH2165C2A681JE01# |  |
|        |               |         | 1000pF  | ±5%  | GCH2165C2A102JE01# |  |
|        |               |         | 1500pF  | ±5%  | GCH2165C2A152JE01# |  |
|        |               |         | 2200pF  | ±5%  | GCH2165C2A222JE01# |  |
|        |               |         | 3300pF  | ±5%  | GCH2165C2A332JE01# |  |
|        | 50Vdc         | COG     | 1000pF  | ±5%  | GCH2165C1H102JE01# |  |
|        |               |         | 1500pF  | ±5%  | GCH2165C1H152JE01# |  |
|        |               |         | 2200pF  | ±5%  | GCH2165C1H222JE01# |  |
|        |               |         | 3300pF  | ±5%  | GCH2165C1H332JE01# |  |
|        |               |         | 4700pF  | ±5%  | GCH2165C1H472JE01# |  |
|        |               |         |         |      |                    |  |
|        |               |         |         |      |                    |  |
|        |               |         |         |      |                    |  |
| 0.95mm | 50Vdc         | COG     | 6800pF  | ±5%  | GCH2195C1H682JE01# |  |
|        |               |         | 10000pF | ±5%  | GCH2195C1H103JE01# |  |
|        |               |         | 15000pF | ±5%  | GCH2195C1H153JE01# |  |
| 1.4mm  | 50Vdc         | COG     | 22000pF | ±5%  | GCH21B5C1H223JE01# |  |

## 3.2×1.6mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |  |
|--------|---------------|---------|--------|------|--------------------|--|
| 0.95mm | 100Vdc        | COG     | 2200pF | ±5%  | GCH3195C2A222JE01# |  |
|        |               |         | 3300pF | ±5%  | GCH3195C2A332JE01# |  |
|        |               |         | 4700pF | ±5%  | GCH3195C2A472JE01# |  |

Part number # indicates the package specification code.

## GCH Series Temperature Compensating Type Part Number List

(→ 3.2×1.6mm)

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 0.95mm | 100Vdc        | COG     | 6800pF  | ±5%  | GCH3195C2A682JE01# |  |
|        |               |         | 10000pF | ±5%  | GCH3195C2A103JE01# |  |
|        | 50Vdc         | COG     | 4700pF  | ±5%  | GCH3195C1H472JE01# |  |
|        |               |         | 6800pF  | ±5%  | GCH3195C1H682JE01# |  |
|        |               |         | 10000pF | ±5%  | GCH3195C1H103JE01# |  |
|        |               |         | 15000pF | ±5%  | GCH3195C1H153JE01# |  |
|        |               |         | 22000pF | ±5%  | GCH3195C1H223JE01# |  |
|        |               |         | 33000pF | ±5%  | GCH3195C1H333JE01# |  |
| 1.25mm | 50Vdc         | COG     | 47000pF | ±5%  | GCH31M5C1H473JE01# |  |

# GCH Series High Dielectric Constant Type Part Number List

## 1.0×0.5mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 0.55mm | 100Vdc        | X7R     | 220pF   | ±10% | GCH155R72A221KE01# |  |
|        |               |         | 470pF   | ±10% | GCH155R72A471KE01# |  |
|        |               |         | 1000pF  | ±10% | GCH155R72A102KE01# |  |
|        |               |         | 2200pF  | ±10% | GCH155R72A222KE01# |  |
|        |               |         | 4700pF  | ±10% | GCH155R72A472KE01# |  |
|        | 50Vdc         | X7R     | 220pF   | ±10% | GCH155R71H221KE01# |  |
|        |               |         | 470pF   | ±10% | GCH155R71H471KE01# |  |
|        |               |         | 1000pF  | ±10% | GCH155R71H102KE01# |  |
|        |               |         | 2200pF  | ±10% | GCH155R71H222KE01# |  |
|        |               |         | 4700pF  | ±10% | GCH155R71H472KE01# |  |
|        |               |         | 10000pF | ±10% | GCH155R71H103KE01# |  |
|        |               |         | 22000pF | ±10% | GCH155R71H223KE01# |  |
|        |               |         | 47000pF | ±10% | GCH155R71H473KE01# |  |
|        |               |         | 0.10μF  | ±10% | GCH155R71H104KE01# |  |
|        |               |         |         |      |                    |  |
|        | 25Vdc         | X7R     | 10000pF | ±10% | GCH155R71E103KE01# |  |
|        |               |         | 22000pF | ±10% | GCH155R71E223KE01# |  |
|        |               |         | 47000pF | ±10% | GCH155R71E473KE01# |  |
|        | 16Vdc         | X7R     | 47000pF | ±10% | GCH155R71C473KE01# |  |
|        |               |         | 0.10μF  | ±10% | GCH155R71C104KE01# |  |
|        |               |         | 0.22μF  | ±10% | GCH155R71C224KE01# |  |
|        | 10Vdc         | X7R     | 0.10μF  | ±10% | GCH155R71A104KE01# |  |
| 0.7mm  | 10Vdc         | X7S     | 1.0μF   | ±10% | GCH155C71A105KE11# |  |

## 1.6×0.8mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 0.9mm  | 100Vdc        | X7R     | 1000pF  | ±10% | GCH188R72A102KE01# |  |
|        |               |         | 2200pF  | ±10% | GCH188R72A222KE01# |  |
|        |               |         | 4700pF  | ±10% | GCH188R72A472KE01# |  |
|        |               |         | 10000pF | ±10% | GCH188R72A103KE01# |  |
|        |               |         | 22000pF | ±10% | GCH188R72A223KE01# |  |
|        |               |         | 0.10μF  | ±10% | GCH188R72A104KE01# |  |
|        | 50Vdc         | X7R     | 1000pF  | ±10% | GCH188R71H102KE01# |  |
|        |               |         | 2200pF  | ±10% | GCH188R71H222KE01# |  |
|        |               |         | 4700pF  | ±10% | GCH188R71H472KE01# |  |
|        |               |         | 10000pF | ±10% | GCH188R71H103KE01# |  |
|        |               |         | 22000pF | ±10% | GCH188R71H223KE01# |  |
|        |               |         | 47000pF | ±10% | GCH188R71H473KE01# |  |
|        |               |         | 0.10μF  | ±10% | GCH188R71H104KE01# |  |
|        |               |         | 0.22μF  | ±10% | GCH188R71H224KE01# |  |
|        |               |         |         |      |                    |  |
|        |               |         |         |      |                    |  |
|        | 25Vdc         | X7R     | 47000pF | ±10% | GCH188R71E473KE01# |  |
|        |               |         | 0.10μF  | ±10% | GCH188R71E104KE01# |  |
|        |               |         | 0.22μF  | ±10% | GCH188R71E224KE01# |  |
|        |               |         | 0.47μF  | ±10% | GCH188R71E474KE01# |  |
|        | 16Vdc         | X7R     | 1.0μF   | ±10% | GCH188R71E105KE01# |  |
|        |               |         | 0.10μF  | ±10% | GCH188R71C104KE01# |  |
|        |               |         | 0.47μF  | ±10% | GCH188R71C474KE01# |  |
|        |               |         | 1.0μF   | ±10% | GCH188R71C105KE01# |  |
|        |               |         |         |      |                    |  |
|        | 10Vdc         | X7S     | 2.2μF   | ±10% | GCH188C71A225KE01# |  |
|        | 6.3Vdc        | X7R     | 2.2μF   | ±10% | GCH188R70J225KE01# |  |

## 2.0×1.25mm

| T max. | Rated Voltage | TC Code | Cap.    | Tol. | Part Number        |  |
|--------|---------------|---------|---------|------|--------------------|--|
| 0.95mm | 25Vdc         | X7R     | 0.47μF  | ±10% | GCH219R71E474KE01# |  |
|        |               |         | 1.0μF   | ±10% | GCH219R71C105KE01# |  |
|        | 1.4mm         | X7R     | 10000pF | ±10% | GCH21BR72A103KE01# |  |
|        |               |         | 22000pF | ±10% | GCH21BR72A223KE01# |  |
|        |               |         | 47000pF | ±10% | GCH21BR72A473KE01# |  |
|        |               |         | 0.10μF  | ±10% | GCH21BR72A104KE01# |  |
|        |               |         |         |      |                    |  |
|        | 50Vdc         | X7R     | 47000pF | ±10% | GCH21BR71H473KE01# |  |
|        |               |         | 0.10μF  | ±10% | GCH21BR71H104KE01# |  |
|        |               |         | 0.22μF  | ±10% | GCH21BR71H224KE01# |  |
|        |               |         | 0.47μF  | ±10% | GCH21BR71H474KE01# |  |
|        |               |         | 1.0μF   | ±10% | GCH21BR71H105KE01# |  |
|        |               |         |         |      |                    |  |
|        | 35Vdc         | X7R     | 1.0μF   | ±10% | GCH21BR7YA105KE01# |  |
|        | 25Vdc         | X7R     | 0.22μF  | ±10% | GCH21BR71E224KE01# |  |
|        |               |         | 1.0μF   | ±10% | GCH21BR71E105KE01# |  |
|        |               |         | 2.2μF   | ±10% | GCH21BR71E225KE01# |  |
|        | 16Vdc         | X7R     | 2.2μF   | ±10% | GCH21BR71C225KE01# |  |
|        |               |         | 4.7μF   | ±10% | GCH21BR71C475KE01# |  |
|        | 10Vdc         | X7R     | 2.2μF   | ±10% | GCH21BR71A225KE01# |  |
|        |               |         | 10μF    | ±10% | GCH21BR71A106KE01# |  |
|        |               | X7S     | 4.7μF   | ±10% | GCH21BC71A475KE01# |  |
| 1.45mm | 6.3Vdc        | X7R     | 10μF    | ±10% | GCH21BR70J106KE01# |  |
|        | 100Vdc        | X7S     | 1.0μF   | ±10% | GCH21BC72A105KE11# |  |
|        | 35Vdc         | X7S     | 4.7μF   | ±10% | GCH21BC7YA475KE11# |  |
|        | 25Vdc         | X7S     | 4.7μF   | ±10% | GCH21BC71E475KE11# |  |

## 3.2×1.6mm

| T max. | Rated Voltage | TC Code | Cap.   | Tol. | Part Number        |  |
|--------|---------------|---------|--------|------|--------------------|--|
| 0.95mm | 100Vdc        | X7R     | 0.10μF | ±10% | GCH319R72A104KE01# |  |
| 1.25mm | 100Vdc        | X7R     | 0.22μF | ±10% | GCH31MR72A224KE01# |  |
|        |               |         | 0.47μF | ±10% | GCH31MR71H474KE01# |  |
|        | 50Vdc         | X7R     | 1.0μF  | ±10% | GCH31MR71H105KE01# |  |
| 1.3mm  | 25Vdc         | X7R     | 2.2μF  | ±10% | GCH31MR71E225KE01# |  |
| 1.8mm  | 100Vdc        | X7R     | 1.0μF  | ±10% | GCH31CR72A105KE01# |  |
|        |               |         | 2.2μF  | ±10% | GCH31CR71H225KE01# |  |
|        | 50Vdc         | X7R     | 4.7μF  | ±10% | GCH31CR71E475KE01# |  |
|        |               |         | 10μF   | ±10% | GCH31CR71C106KE01# |  |
|        | 25Vdc         | X7R     | 4.7μF  | ±10% | GCH31CR71E475KE01# |  |
|        |               |         | 10μF   | ±10% | GCH31CR71C106KE01# |  |
|        | 16Vdc         | X7R     | 4.7μF  | ±10% | GCH31CR71C475KE01# |  |
|        | 10Vdc         | X7R     | 10μF   | ±10% | GCH31CR71A106KE01# |  |

## 3.2×2.5mm

| T max. | Rated Voltage | TC Code | Cap.  | Tol. | Part Number        |  |
|--------|---------------|---------|-------|------|--------------------|--|
| 2.2mm  | 100Vdc        | X7R     | 2.2μF | ±10% | GCH32DR72A225KE01# |  |
|        | 25Vdc         | X7R     | 4.7μF | ±10% | GCH32DR71E475KE01# |  |
|        | 16Vdc         | X7R     | 10μF  | ±10% | GCH32DR71C106KE01# |  |
| 2.7mm  | 50Vdc         | X7R     | 1.0μF | ±10% | GCH32ER71H105KE01# |  |
|        |               |         | 4.7μF | ±10% | GCH32ER71H475KE01# |  |
|        | 10Vdc         | X7R     | 22μF  | ±10% | GCH32ER71A226KE01# |  |
|        |               |         | 47μF  | ±10% | GCH32ER70J476KE01# |  |
|        | 6.3Vdc        | X7R     | 47μF  | ±10% | GCH32ER70J476KE01# |  |

Part number # indicates the package specification code.

# GRM, GJM, GMA, GMD, GQM, GR3, GRJ, LLA, LLL, LLM, LLR, KRM, KR3

## ⚠️Caution/Notice

WEB 

### ⚠️Caution

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### Notice

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## Storage and Operation Conditions

1. The performance of chip monolithic ceramic capacitors may be affected by the storage conditions.

1-1. Store the capacitors in the following conditions:

Room Temperature of +5°C to +40°C and a Relative Humidity of 20% to 70%.

- (1) Sunlight, dust, rapid temperature changes, corrosive gas atmosphere, or high temperature and humidity conditions during storage may affect solderability and packaging performance. Therefore, please maintain the storage temperature and humidity. Use the product within six months, as prolonged storage may cause oxidation of the terminations (outer electrodes).
- (2) Please confirm solderability before using after six months. Store the capacitors without opening the original bag. Even if the storage period is short, do not exceed the specified atmospheric conditions.

1-2. Corrosive gas can react with the termination (external) electrodes or lead wires of capacitors, and result in poor solderability. Do not store the capacitors in an atmosphere consisting of corrosive gas (e.g., hydrogen sulfide, sulfur dioxide, chlorine, ammonia gas, etc.).

1-3. Due to moisture condensation caused by rapid humidity changes, or the photochemical change caused by direct sunlight on the terminal electrodes and/or the resin/epoxy coatings, the solderability and electrical performance may deteriorate. Do not store capacitors under direct sunlight or in high humidity conditions.

## Rating

### 1. Temperature Dependent Characteristics

1. The electrical characteristics of a capacitor can change with temperature.

1-1. For capacitors having larger temperature dependency, the capacitance may change with temperature changes.

The following actions are recommended in order to ensure suitable capacitance values.

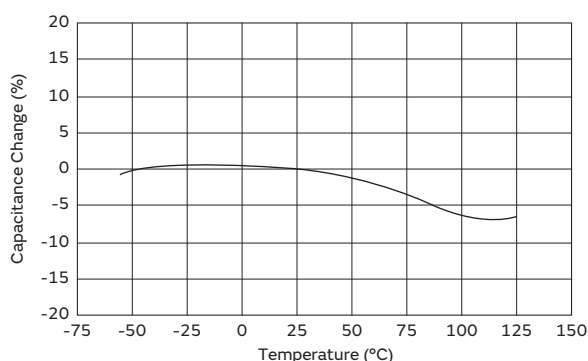
- (1) Select a suitable capacitance for the operating temperature range.

(2) The capacitance may change within the rated temperature.

When you use a high dielectric constant type capacitor in a circuit that needs a tight (narrow) capacitance tolerance (e.g., a time-constant circuit), please carefully consider the temperature characteristics, and carefully confirm the various characteristics in actual use conditions and the actual system.

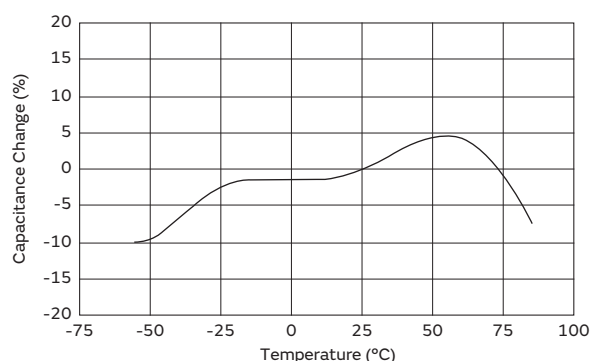
[Example of Temperature Characteristics X7R (R7)]

Sample: 0.1μF, Rated Voltage 50VDC



[Example of Temperature Characteristics X5R (R6)]

Sample: 22μF, Rated Voltage 4VDC



### 2. Measurement of Capacitance

1. Measure capacitance with the voltage and frequency specified in the product specifications.

1-1. The output voltage of the measuring equipment may decrease occasionally when capacitance is high. Please confirm whether a prescribed measured voltage is impressed to the capacitor.

1-2. The capacitance values of high dielectric constant type capacitors change depending on the AC voltage applied. Please consider the AC voltage characteristics when selecting a capacitor to be used in an AC circuit.

Continued on the following page. ↗

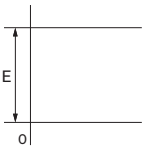
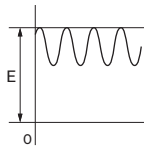
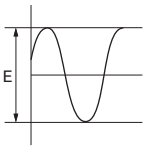
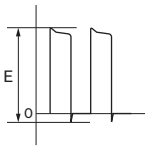
## ⚠Caution

Continued from the preceding page. ↘

### 3. Applied Voltage

1. Do not apply a voltage to the capacitor that exceeds the rated voltage as called out in the specifications.
  - 1-1. Applied voltage between the terminals of a capacitor shall be less than or equal to the rated voltage.
    - (1) When AC voltage is superimposed on DC voltage, the zero-to-peak voltage shall not exceed the rated DC voltage.  
When AC voltage or pulse voltage is applied, the peak-to-peak voltage shall not exceed the rated DC voltage.
    - (2) Abnormal voltages (surge voltage, static electricity, pulse voltage, etc.) shall not exceed the rated DC voltage.

#### Typical Voltage Applied to the DC Capacitor

| DC Voltage                                                                        | DC Voltage+AC                                                                     | AC Voltage                                                                         | Pulse Voltage                                                                       |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |

(E: Maximum possible applied voltage.)

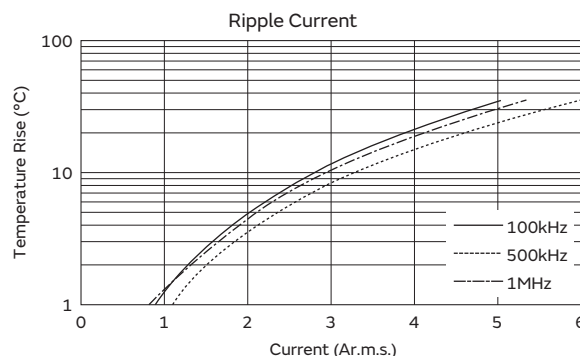
- 1-2. Influence of over voltage  
Over voltage that is applied to the capacitor may result in an electrical short circuit caused by the breakdown of the internal dielectric layers.  
The time duration until breakdown depends on the applied voltage and the ambient temperature.
2. Use a safety standard certified capacitor in a power supply input circuit (AC filter), as it is also necessary to consider the withstand voltage and impulse withstand voltage defined for each device.

### 4. Type of Applied Voltage and Self-heating Temperature

1. Confirm the operating conditions to make sure that no large current is flowing into the capacitor due to the continuous application of an AC voltage or pulse voltage.  
When a DC rated voltage product is used in an AC voltage circuit or a pulse voltage circuit, the AC current or pulse current will flow into the capacitor; therefore check the self-heating condition.  
Please confirm the surface temperature of the capacitor so that the temperature remains within the upper limits of the operating temperature, including the rise in temperature due to self-heating. When the capacitor is used with a high-frequency voltage or pulse voltage, heat may be generated by dielectric loss.  
<Applicable to Rated Voltage of less than 100VDC>
  - 1-1. The load should be contained to the level such that when measuring at atmospheric temperature of 25°C, the product's self-heating remains below 20°C and the surface temperature of the capacitor in the actual circuit remains within the maximum operating temperature.

[Example of Temperature Rise (Heat Generation) in Chip Monolithic Ceramic Capacitors in Contrast to Ripple Current]

Sample: R (R1) characteristics 10μF,  
Rated voltage: DC10V



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<Applicable to Temperature Characteristics X7R (R7), X7T (D7) beyond Rated Voltage of 200VDC>

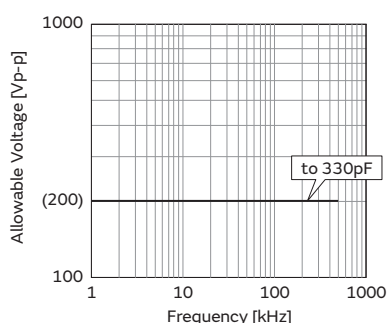
1-2. The load should be contained so that the self-heating of the capacitor body remains below 20°C, when measuring at an ambient temperature of 25°C. In addition, use a K thermocouple of  $\phi 0.1\text{mm}$  with less heat capacity when measuring, and measure in a condition where there is no effect from the radiant heat of other components or air flow caused by convection. Excessive generation of heat may cause deterioration of the characteristics and reliability of the capacitor. (Absolutely do not perform measurements while the cooling fan is operating, as an accurate measurement may not be performed.)

<Applicable to Temperature Characteristics U2J (7U), C0G (5C) beyond Rated Voltage of 200VDC>

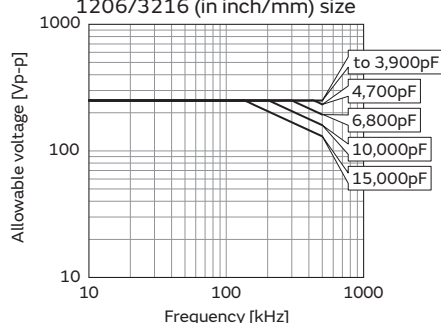
1-3. Since the self-heating is low in the low loss series, the allowable power becomes extremely high compared to the common X7R (R7) characteristics. However, when a load with self-heating of 20°C is applied at the rated voltage, the allowable power may be exceeded. When the capacitor is used in a high-frequency voltage circuit of 1kHz or more, the frequency of the applied voltage should be less than 500kHz sine wave (less than 100kHz for a product with rated voltage of DC3.15kV), to limit the voltage load so that the load remains within the derating shown in the following figure. In the case of non-sine wave, high-frequency components exceeding the fundamental frequency may be included. In such a case, please contact Murata. The excessive generation of heat may cause deterioration of the characteristics and reliability of the capacitor. (Absolutely do not perform measurements while the cooling fan is operating, as an accurate measurement may not be performed.)

The surface temperature of the capacitor: 125°C or less  
(including self-heating)

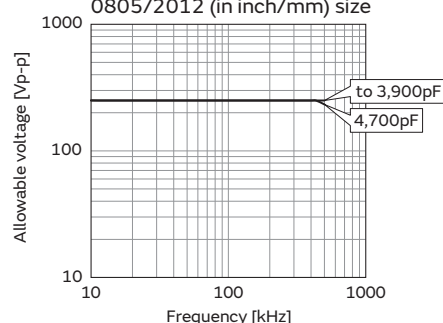
C0G (5C) char., Rated Voltage: DC200V



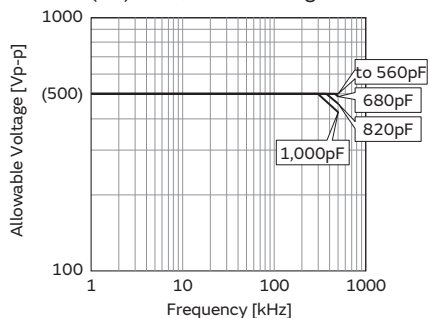
C0G (5C) char., Rated Voltage: DC250V  
1206/3216 (in inch/mm) size



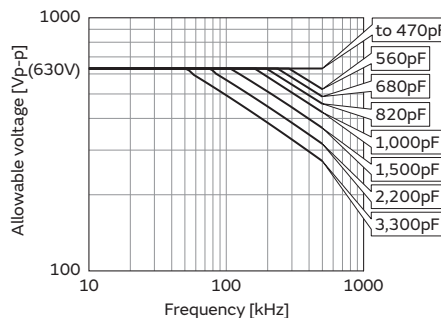
C0G (5C) char., Rated Voltage: DC250V  
0805/2012 (in inch/mm) size



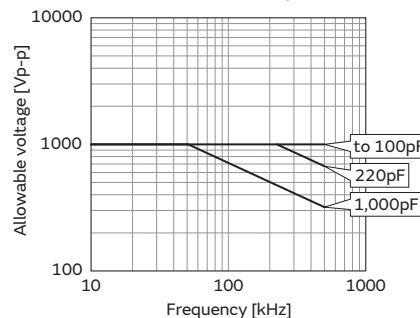
C0G (5C) char., Rated Voltage: DC500V



C0G char., Rated Voltage: DC630V



C0G char., Rated Voltage: DC1kV



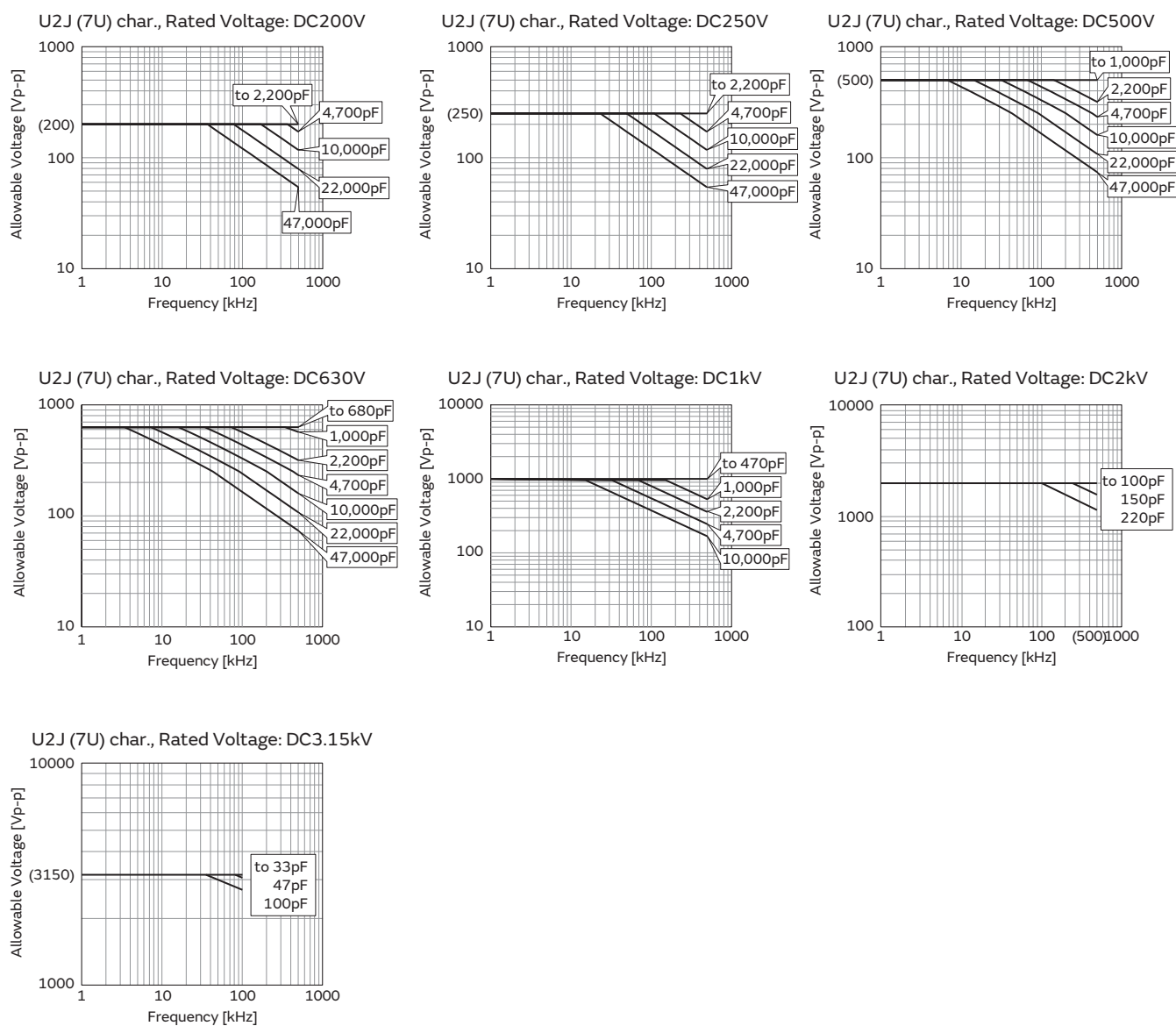
The sine-wave frequency VS allowable voltage

Continued on the following page. ↗

## ⚠Caution

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The surface temperature of the capacitor: 125°C or less  
(including self-heating)



The sine-wave frequency VS allowable voltage

Continued on the following page. ↗



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## 5. DC Voltage and AC Voltage Characteristics

1. The capacitance value of a high dielectric constant type capacitor changes depending on the DC voltage applied. Please consider the DC voltage characteristics when a capacitor is selected for use in a DC circuit.

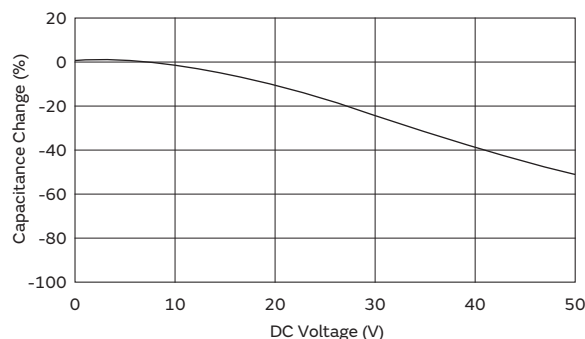
1-1. The capacitance of ceramic capacitors may change sharply depending on the applied voltage (see figure). Please confirm the following in order to secure the capacitance.

- (1) Determine whether the capacitance change caused by the applied voltage is within the allowed range.
- (2) In the DC voltage characteristics, the rate of capacitance change becomes larger as voltage increases, even if the applied voltage is below the rated voltage. When a high dielectric constant type capacitor is used in a circuit that requires a tight (narrow) capacitance tolerance (e.g., a time constant circuit), please carefully consider the voltage characteristics, and confirm the various characteristics in the actual operating conditions of the system.

2. The capacitance values of high dielectric constant type capacitors changes depending on the AC voltage applied. Please consider the AC voltage characteristics when selecting a capacitor to be used in an AC circuit.

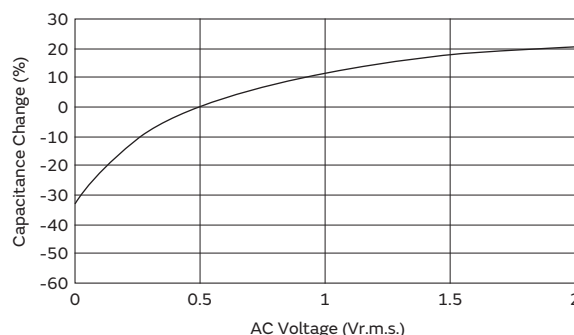
[Example of DC Voltage Characteristics]

Sample: X7R (R7) Characteristics 0.1μF,  
Rated Voltage 50VDC



[Example of AC Voltage Characteristics]

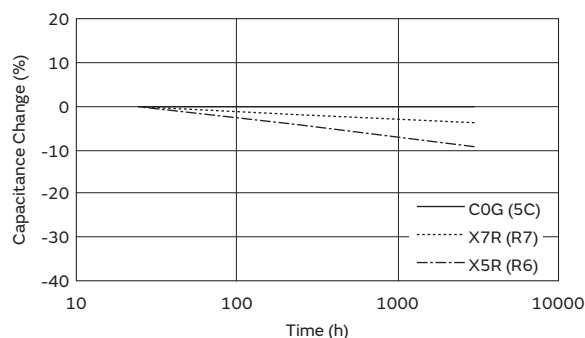
Sample: X7R (R7) Characteristics 10μF,  
Rated Voltage 6.3VDC



## 6. Capacitance Aging

1. The high dielectric constant type capacitors have an Aging characteristic in which the capacitance value decreases with the passage of time. When you use high dielectric constant type capacitors in a circuit that needs a tight (narrow) capacitance tolerance (e.g., a time-constant circuit), please carefully consider the characteristics of these capacitors, such as their aging, voltage, and temperature characteristics. In addition, check capacitors using your actual appliances at the intended environment and operating conditions.

[Example of Change Over Time (Aging Characteristics)]



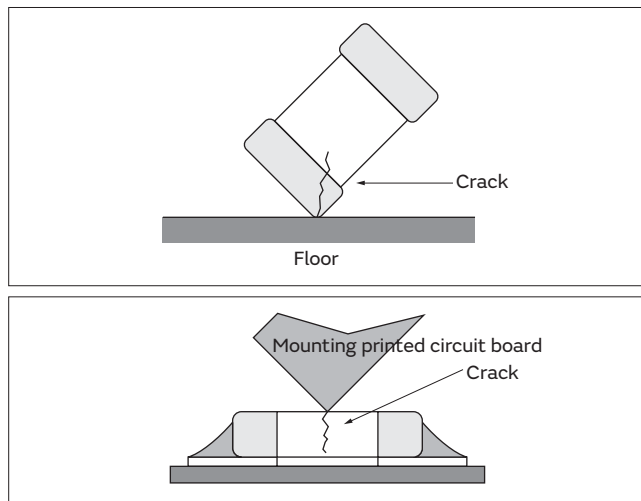
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## ⚠Caution

Continued from the preceding page. ↘

### 7. Vibration and Shock

1. Please confirm the kind of vibration and/or shock, its condition, and any generation of resonance.  
Please mount the capacitor so as not to generate resonance, and do not allow any impact on the terminals.
2. Mechanical shock due to being dropped may cause damage or a crack in the dielectric material of the capacitor.  
Do not use a dropped capacitor because the quality and reliability may be deteriorated.
3. When printed circuit boards are piled up or handled, the corner of another printed circuit board should not be allowed to hit the capacitor, in order to avoid a crack or other damage to the capacitor.

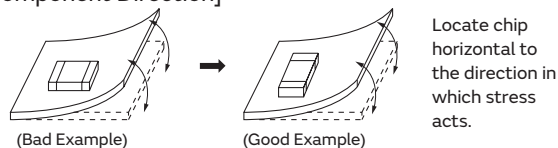


## Soldering and Mounting

### 1. Mounting Position

1. Confirm the best mounting position and direction that minimizes the stress imposed on the capacitor during flexing or bending the printed circuit board.
- 1-1. Choose a mounting position that minimizes the stress imposed on the chip during flexing or bending of the board.

#### [Component Direction]

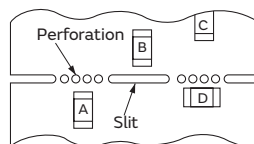


#### [Chip Mounting Close to Board Separation Point]

It is effective to implement the following measures, to reduce stress in separating the board.

It is best to implement all of the following three measures; however, implement as many measures as possible to reduce stress.

| Contents of Measures                                                                       | Stress Level |
|--------------------------------------------------------------------------------------------|--------------|
| (1) Turn the mounting direction of the component parallel to the board separation surface. | $A > D$ *1   |
| (2) Add slits in the board separation part.                                                | $A > B$      |
| (3) Keep the mounting position of the component away from the board separation surface.    | $A > C$      |

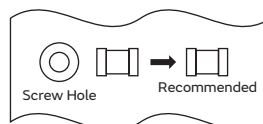


\*1  $A > D$  is valid when stress is added vertically to the perforation as with Hand Separation.

If a Cutting Disc is used, stress will be diagonal to the PCB, therefore  $A > D$  is invalid.

#### [Mounting Capacitors Near Screw Holes]

When a capacitor is mounted near a screw hole, it may be affected by the board deflection that occurs during the tightening of the screw. Mount the capacitor in a position as far away from the screw holes as possible.



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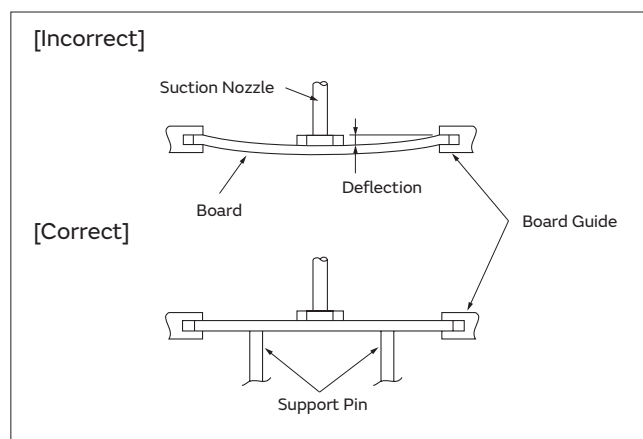
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## 2. Information before Mounting

1. Do not re-use capacitors that were removed from the equipment.
2. Confirm capacitance characteristics under actual applied voltage.
3. Confirm the mechanical stress under actual process and equipment use.
4. Confirm the rated capacitance, rated voltage and other electrical characteristics before assembly.
5. Prior to use, confirm the solderability of capacitors that were in long-term storage.
6. Prior to measuring capacitance, carry out a heat treatment for capacitors that were in long-term storage.
7. The use of Sn-Zn based solder will deteriorate the reliability of the MLCC.  
Please contact our sales representative or product engineers on the use of Sn-Zn based solder in advance.
8. We have also produced a DVD which shows a summary of our recommendations, regarding the precautions for mounting. Please contact our sales representative to request the DVD.

## 3. Maintenance of the Mounting (pick and place) Machine

1. Make sure that the following excessive forces are not applied to the capacitors.
    - 1-1. In mounting the capacitors on the printed circuit board, any bending force against them shall be kept to a minimum to prevent them from any damage or cracking. Please take into account the following precautions and recommendations for use in your process.
      - (1) Adjust the lowest position of the pickup nozzle so as not to bend the printed circuit board.
      - (2) Adjust the nozzle pressure within a static load of 1N to 3N during mounting.
  2. Dirt particles and dust accumulated between the suction nozzle and the cylinder inner wall prevent the nozzle from moving smoothly. This imposes greater force upon the chip during mounting, causing cracked chips. Also, the locating claw, when worn out, imposes uneven forces on the chip when positioning, causing cracked chips. The suction nozzle and the locating claw must be maintained, checked, and replaced periodically.
- <Applicable to ZRB Series>
3. To adjust the inspection tolerance for automated appearance sorting machine of mounting position, because ZRB series are easier to shift the mounting position than standard MLCC.
  4. To check the overturn and reverse of chip.
  5. To control mounting speed carefully, because ZRB series is heavier than standard MLCC.



Continued on the following page. ↗

## ⚠Caution

Continued from the preceding page. ↘

### 4-1. Reflow Soldering

- When sudden heat is applied to the components, the mechanical strength of the components will decrease because a sudden temperature change causes deformation inside the components. In order to prevent mechanical damage to the components, preheating is required for both the components and the PCB. Preheating conditions are shown in table 1. It is required to keep the temperature differential between the solder and the components surface ( $\Delta T$ ) as small as possible.
- When components are immersed in solvent after mounting, be sure to maintain the temperature difference ( $\Delta T$ ) between the component and the solvent within the range shown in table 1.

Table 1

| Series                      | Chip Dimension Code (L/W) | Temperature Differential          |
|-----------------------------|---------------------------|-----------------------------------|
| GRM/GJM/GQM/GR3/GRJ/KRM/LLR | 02/03/15/18/21/31         | $\Delta T \leq 190^\circ\text{C}$ |
| LLL                         | 02/03/15/18/1U/21/31      |                                   |
| ZRB                         | 15/18                     |                                   |
| GR3/GRJ/GRM/KR3/KRM         | 32/43/55                  | $\Delta T \leq 130^\circ\text{C}$ |
| LLA/LLM                     | 18/21/31                  |                                   |
| GQM                         | 22                        |                                   |

#### Recommended Conditions

|                  | Pb-Sn Solder | Lead Free Solder      |
|------------------|--------------|-----------------------|
| Peak Temperature | 230 to 250°C | 240 to 260°C          |
| Atmosphere       | Air          | Air or N <sub>2</sub> |

Pb-Sn Solder: Sn-37Pb

Lead Free Solder: Sn-3.0Ag-0.5Cu

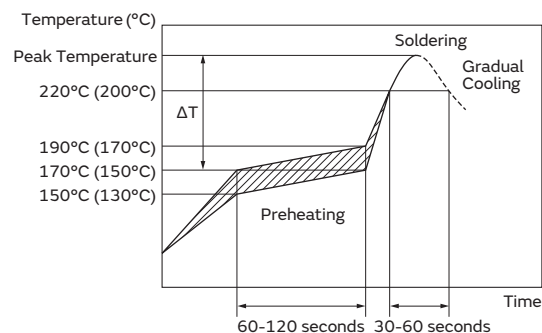
- When a capacitor is mounted at a temperature lower than the peak reflow temperature recommended by the solder manufacturer, the following quality problems can occur. Consider factors such as the placement of peripheral components and the reflow temperature setting to prevent the capacitor's reflow temperature from dropping below the peak temperature specified. Be sure to evaluate the mounting situation beforehand and verify that none of the following problems occur.

- Drop in solder wettability
- Solder voids
- Possible occurrence of whiskering
- Drop in bonding strength
- Drop in self-alignment properties
- Possible occurrence of tombstones and/or shifting on the land patterns of the circuit board

#### Inverting the PCB

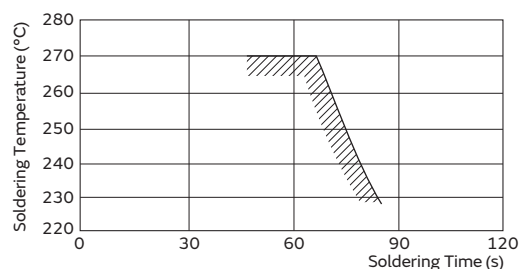
Make sure not to impose any abnormal mechanical shocks to the PCB.

#### [Standard Conditions for Reflow Soldering]



Temperature  
In case of Lead Free Solder  
( ) : In case of Pb-Sn Solder

#### [Allowable Reflow Soldering Temperature and Time]



In the case of repeated soldering, the accumulated soldering time must be within the range shown above.

#### 4. Optimum Solder Amount for Reflow Soldering

- 4-1. Overly thick application of solder paste results in an excessive solder fillet height. This makes the chip more susceptible to mechanical and thermal stress on the board and may cause the chips to crack.
- 4-2. Too little solder paste results in a lack of adhesive strength on the termination, which may result in chips breaking loose from the PCB.
- 4-3. Please confirm that solder has been applied smoothly to the termination.

Continued on the following page. ↗



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## 4-2. Flow Soldering

1. Do not apply flow soldering to chips not listed in table 2.

Table 2

| Seies   | Chip Dimension Code (L/W) | Temperature Differential            |
|---------|---------------------------|-------------------------------------|
| GR3/GRM | 18/21/31                  | $\Delta T \leq 150^{\circ}\text{C}$ |
| GQM     | 18/21                     |                                     |
| LLL     | 21/31                     |                                     |
| GRJ     | 18/21/31                  |                                     |

- When sudden heat is applied to the components, the mechanical strength of the components will decrease because a sudden temperature change causes deformation inside the components. In order to prevent mechanical damage to the components, preheating is required for both of the components and the PCB. Preheating conditions are shown in table 2. It is required to keep the temperature differential between the solder and the components surface ( $\Delta T$ ) as low as possible.
- Excessively long soldering time or high soldering temperature can result in leaching of the terminations, causing poor adhesion or a reduction in capacitance value due to loss of contact between the inner electrodes and terminations.
- When components are immersed in solvent after mounting, be sure to maintain the temperature differential ( $\Delta T$ ) between the component and solvent within the range shown in the table 2.

### Recommended Conditions

|                             | Pb-Sn Solder | Lead Free Solder      |
|-----------------------------|--------------|-----------------------|
| Preheating Peak Temperature | 90 to 110°C  | 100 to 120°C          |
| Soldering Peak Temperature  | 240 to 250°C | 250 to 260°C          |
| Atmosphere                  | Air          | Air or N <sub>2</sub> |

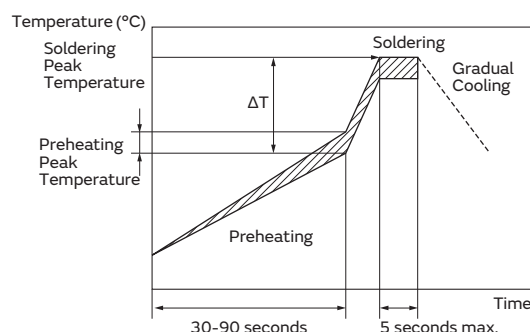
Pb-Sn Solder: Sn-37Pb

Lead Free Solder: Sn-3.0Ag-0.5Cu

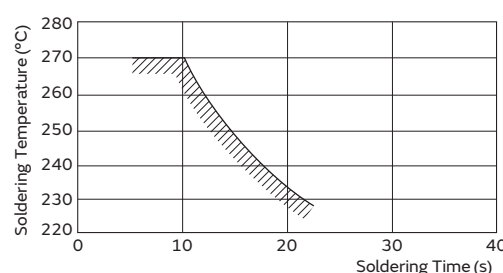
### 5. Optimum Solder Amount for Flow Soldering

- The top of the solder fillet should be lower than the thickness of the components. If the solder amount is excessive, the risk of cracking is higher during board bending or any other stressful condition.

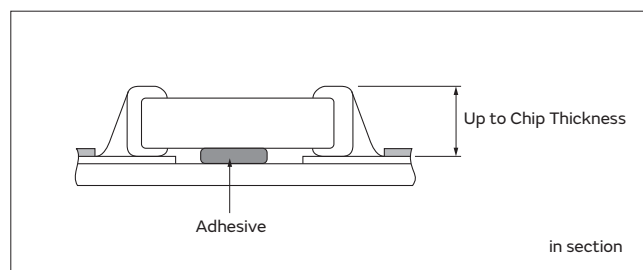
#### [Standard Conditions for Flow Soldering]



#### [Allowable Flow Soldering Temperature and Time]



In the case of repeated soldering, the accumulated soldering time must be within the range shown above.



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## ⚠Caution

Continued from the preceding page. ↘

### 4-3. Correction of Soldered Portion

When sudden heat is applied to the capacitor, distortion caused by the large temperature difference occurs internally, and can be the cause of cracks. Capacitors also tend to be affected by mechanical and thermal stress depending on the board preheating temperature or the soldering fillet shape, and can be the cause of cracks. Please refer to "1. PCB Design" or "3. Optimum solder amount" for the solder amount and the fillet shapes.

Do not correct with a soldering iron for ZRB series.

Correction with a soldering iron for ZRB series may cause loss suppress acoustic noise, because the solder amount become excessive.

#### 1. Correction with a Soldering Iron

- 1-1. In order to reduce damage to the capacitor, be sure to preheat the capacitor and the mounting board. Preheat to the temperature range shown in Table 3. A hot plate, hot air type preheater, etc. can be used for preheating.
- 1-2. After soldering, do not allow the component/PCB to cool down rapidly.
- 1-3. Perform the corrections with a soldering iron as quickly as possible. If the soldering iron is applied too long, there is a possibility of causing solder leaching on the terminal electrodes, which will cause deterioration of the adhesive strength and other problems.

Table 3

| Series              | Chip Dimension Code (L/W) | Temperature of Soldering Iron Tip | Preheating Temperature | Temperature Differential ( $\Delta T$ ) | Atmosphere |
|---------------------|---------------------------|-----------------------------------|------------------------|-----------------------------------------|------------|
| GJM/GQM/GR3/GRJ/GRM | 03/15/18/21/31            | 350°C max.                        | 150°C min.             | $\Delta T \leq 190^\circ\text{C}$       | Air        |
| GRJ/GRM             | 32/43/55                  | 280°C max.                        | 150°C min.             | $\Delta T \leq 130^\circ\text{C}$       | Air        |
| GQM                 | 22                        |                                   |                        |                                         |            |

\*Applicable for both Pb-Sn and Lead Free Solder.

Pb-Sn Solder: Sn-37Pb

Lead Free Solder: Sn-3.0Ag-0.5Cu

\*Please manage  $\Delta T$  in the temperature of soldering iron and the preheating temperature.

#### 2. Correction with Spot Heater

Compared to local heating with a soldering iron, hot air heating by a spot heater heats the overall component and board, therefore, it tends to lessen the thermal shock. In the case of a high density mounted board, a spot heater can also prevent concerns of the soldering iron making direct contact with the component.

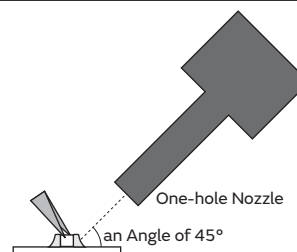
- 2-1. If the distance from the hot air outlet of the spot heater to the component is too close, cracks may occur due to thermal shock. To prevent this problem, follow the conditions shown in Table 4.

- 2-2. In order to create an appropriate solder fillet shape, it is recommended that hot air be applied at the angle shown in Figure 1.

Table 4

|                                   |                                                             |
|-----------------------------------|-------------------------------------------------------------|
| Distance                          | 5mm or more                                                 |
| Hot Air Application Angle         | 45° *Figure 1                                               |
| Hot Air Temperature Nozzle Outlet | 400°C max.                                                  |
| Application Time                  | Less than 10 seconds<br>(1206 (3216 in mm) size or smaller) |
|                                   | Less than 30 seconds<br>(1210 (3225 in mm) size or larger)  |

[Figure 1]

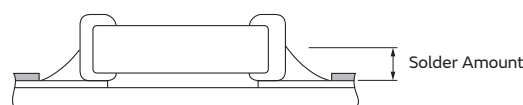


#### 3. Optimum solder amount when re-working with a soldering iron

- 3-1. If the solder amount is excessive, the risk of cracking is higher during board bending or any other stressful condition.

Too little solder amount results in a lack of adhesive strength on the termination, which may result in chips breaking loose from the PCB.

Please confirm that solder has been applied smoothly and rising to the end surface of the chip.



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3-2. A soldering iron with a tip of  $\phi 3\text{mm}$  or smaller should be used. It is also necessary to keep the soldering iron from touching the components during the re-work.

3-3. Solder wire with  $\phi 0.5\text{mm}$  or smaller is required for soldering.

<Applicable to KR3/KRM Series>

4. For the shape of the soldering iron tip, refer to the figure on the right.

Regarding the type of solder, use a wire diameter of  $\phi 0.5\text{mm}$  or less (rosin core wire solder).

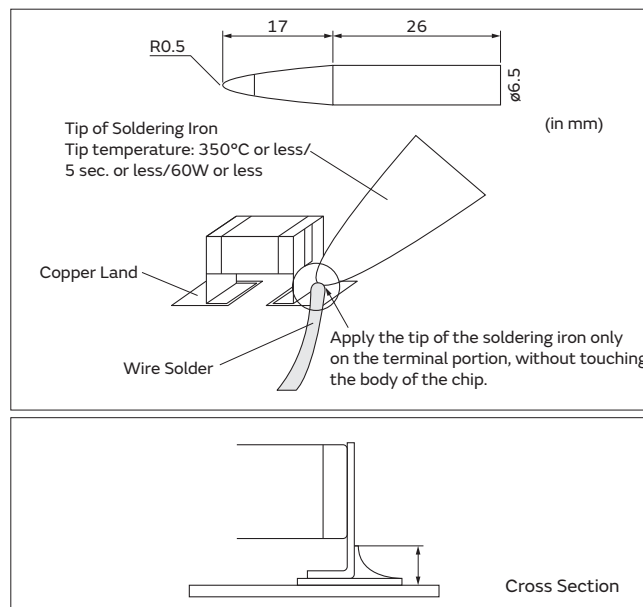
4-1. How to Apply the Soldering Iron

Apply the tip of the soldering iron against the lower end of the metal terminal.

- 1) In order to prevent cracking caused by sudden heating of the ceramic device, do not touch the ceramic base directly.
- 2) In order to prevent deviations and dislocating of the chip, do not touch the junction of the chip and the metal terminal, and the metal portion on the outside directly.

4-2. Appropriate Amount of Solder

The amount of solder for corrections by soldering iron, should be lower than the height of the lower side of the chip.



## 5. Washing

Excessive ultrasonic oscillation during cleaning can cause the PCBs to resonate, resulting in cracked chips or broken solder joints. Take note not to vibrate PCBs.

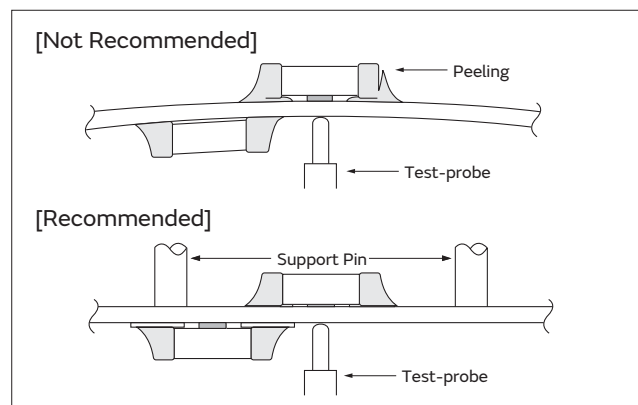
## 6. Electrical Test on Printed Circuit Board

1. Confirm position of the support pin or specific jig, when inspecting the electrical performance of a capacitor after mounting on the printed circuit board.

1-1. Avoid bending the printed circuit board by the pressure of a test-probe, etc.

The thrusting force of the test probe can flex the PCB, resulting in cracked chips or open solder joints. Provide support pins on the back side of the PCB to prevent warping or flexing. Install support pins as close to the test-probe as possible.

1-2. Avoid vibration of the board by shock when a test-probe contacts a printed circuit board.



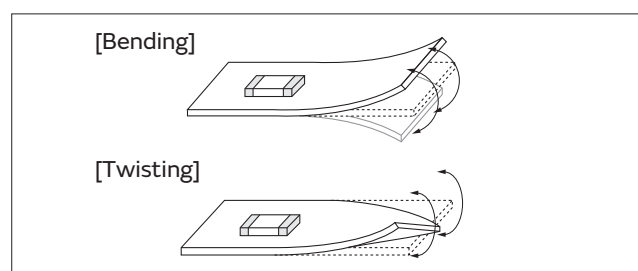
## 7. Printed Circuit Board Cropping

1. After mounting a capacitor on a printed circuit board, do not apply any stress to the capacitor that causes bending or twisting the board.

1-1. In cropping the board, the stress as shown at right may cause the capacitor to crack.

Cracked capacitors may cause deterioration of the insulation resistance, and result in a short.

Avoid this type of stress to a capacitor.



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## ⚠Caution

Continued from the preceding page. ↘

### 2. Check the cropping method for the printed circuit board in advance.

2-1. Printed circuit board cropping shall be carried out by using a jig or an apparatus (Disc separator, router type separator, etc.) to prevent the mechanical stress that can occur to the board.

| Board Separation Method  | Hand Separation<br>Nipper Separation                                            | (1) Board Separation Jig                                                                                                        | Board Separation Apparatus                                                                                                                                                           |                           |
|--------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
|                          |                                                                                 |                                                                                                                                 | (2) Disc Separator                                                                                                                                                                   | (3) Router Type Separator |
| Level of stress on board | High                                                                            | Medium                                                                                                                          | Medium                                                                                                                                                                               | Low                       |
| Recommended              | ×                                                                               | △*                                                                                                                              | △*                                                                                                                                                                                   | ○                         |
| Notes                    | Hand and nipper separation apply a high level of stress.<br>Use another method. | <ul style="list-style-type: none"> <li>Board handling</li> <li>Board bending direction</li> <li>Layout of capacitors</li> </ul> | <ul style="list-style-type: none"> <li>Board handling</li> <li>Layout of slits</li> <li>Design of V groove</li> <li>Arrangement of blades</li> <li>Controlling blade life</li> </ul> | Board handling            |

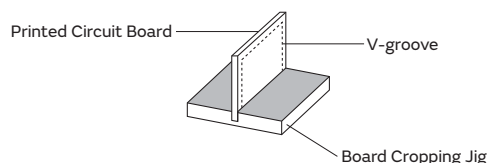
\* When a board separation jig or disc separator is used, if the following precautions are not observed, a large board deflection stress will occur and the capacitors may crack. Use router type separator if at all possible.

#### (1) Example of a suitable jig

[In the case of Single-side Mounting]

An outline of the board separation jig is shown as follows. Recommended example: Stress on the component mounting position can be minimized by holding the portion close to the jig, and bend in the direction towards the side where the capacitors are mounted. Not recommended example: The risk of cracks occurring in the capacitors increases due to large stress being applied to the component mounting position, if the portion away from the jig is held and bent in the direction opposite the side where the capacitors are mounted.

#### [Outline of Jig]



#### Hand Separation

| Recommended | Not Recommended |
|-------------|-----------------|
|             |                 |

[In the case of Double-sided Mounting]

Since components are mounted on both sides of the board, the risk of cracks occurring can not be avoided with the above method. Therefore, implement the following measures to prevent stress from being applied to the components.

(Measures)

- (1) Consider introducing a router type separator. If it is difficult to introduce a router type separator, implement the following measures. (Refer to item 1. Mounting Position)
- (2) Mount the components parallel to the board separation surface.
- (3) When mounting components near the board separation point, add slits in the separation position near the component.
- (4) Keep the mounting position of the components away from the board separation point.

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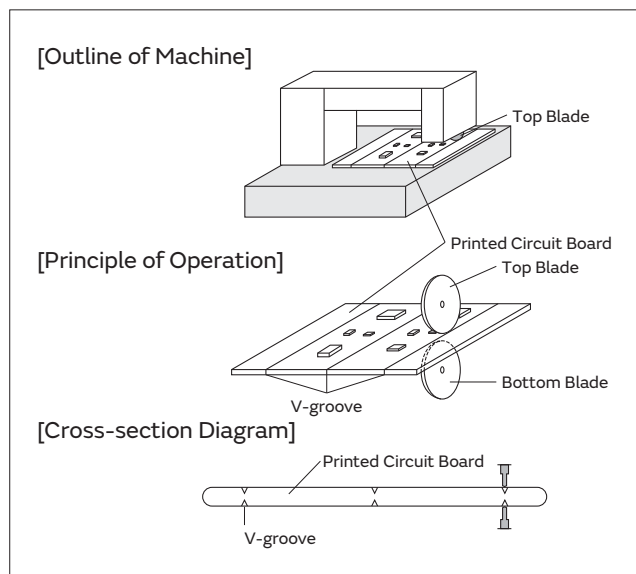
## (2) Example of a Disc Separator

An outline of a disc separator is shown as follows.  
As shown in the Principle of Operation, the top blade and bottom blade are aligned with the V-grooves on the printed circuit board to separate the board.

In the following case, board deflection stress will be applied and cause cracks in the capacitors.

- (1) When the adjustment of the top and bottom blades are misaligned, such as deviating in the top-bottom, left-right or front-rear directions
- (2) The angle of the V groove is too low, depth of the V groove is too shallow, or the V groove is misaligned top-bottom

IF V groove is too deep, it is possible to brake when you handle and carry it. Carefully design depth of the V groove with consideration about strength of material of the printed circuit board.



## Disc Separator

| Recommended                          | Not Recommended                      |                                      |                                      |
|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
|                                      | Top-bottom Misalignment              | Left-right Misalignment              | Front-rear Misalignment              |
| <p>Top Blade</p> <p>Bottom Blade</p> | <p>Top Blade</p> <p>Bottom Blade</p> | <p>Top Blade</p> <p>Bottom Blade</p> | <p>Top Blade</p> <p>Bottom Blade</p> |

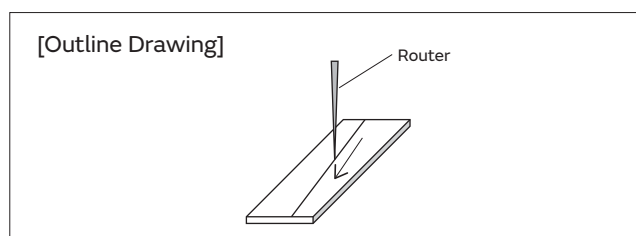
## V-groove Design

| Example of Recommended V-groove Design | Not Recommended         |           |                   |                |
|----------------------------------------|-------------------------|-----------|-------------------|----------------|
|                                        | Left-right Misalignment | Low-Angle | Depth too Shallow | Depth too Deep |
|                                        |                         |           |                   |                |

## (3) Example of Router Type Separator

The router type separator performs cutting by a router rotating at a high speed. Since the board does not bend in the cutting process, stress on the board can be suppressed during board separation.

When attaching or removing boards to/from the router type separator, carefully handle the boards to prevent bending.



Continued on the following page. ↗

## ⚠Caution

Continued from the preceding page. ↩

### 8. Assembly

#### 1. Handling

If a board mounted with capacitors is held with one hand, the board may bend. Firmly hold the edges of the board with both hands when handling.

If a board mounted with capacitors is dropped, cracks may occur in the capacitors.

Do not use dropped boards, as there is a possibility that the quality of the capacitors may be impaired.

#### 2. Attachment of Other Components

##### 2-1. Mounting of Other Components

Pay attention to the following items, when mounting other components on the back side of the board after capacitors have been mounted on the opposite side.

When the bottom dead point of the suction nozzle is set too low, board deflection stress may be applied to the capacitors on the back side (bottom side), and cracks may occur in the capacitors.

- After the board is straightened, set the bottom dead point of the nozzle on the upper surface of the board.
- Periodically check and adjust the bottom dead point.

##### 2-2. Inserting Components with Leads into Boards

When inserting components (transformers, IC, etc.) into boards, bending the board may cause cracks in the capacitors or cracks in the solder.

Pay attention to the following.

- Increase the size of the holes to insert the leads, to reduce the stress on the board during insertion.
- Fix the board with support pins or a dedicated jig before insertion.
- Support below the board so that the board does not bend. When using multiple support pins on the board, periodically confirm that there is no difference in the height of each support pin.

##### 2-3. Attaching/Removing Sockets

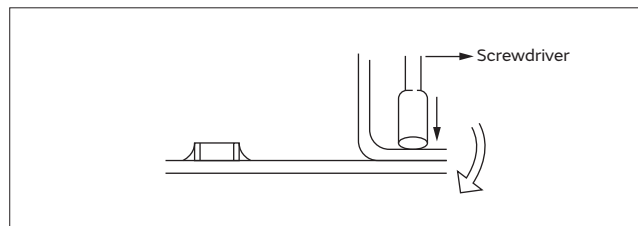
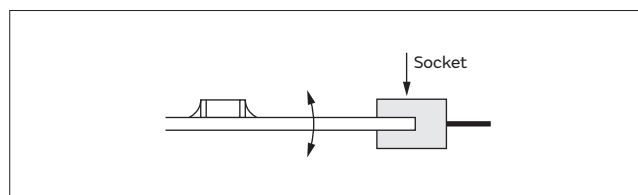
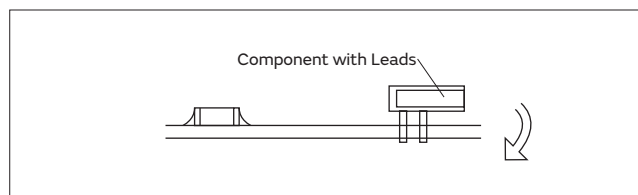
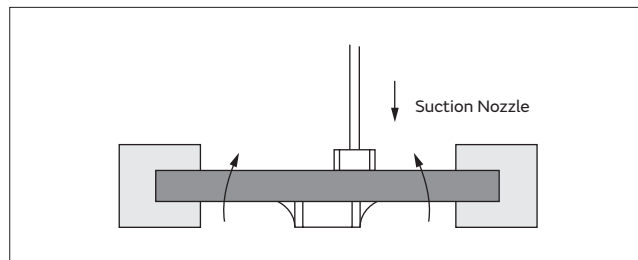
When the board itself is a connector, the board may bend when a socket is attached or removed. Plan the work so that the board does not bend when a socket is attached or removed.

##### 2-4. Tightening Screws

The board may be bent, when tightening screws, etc. during the attachment of the board to a shield or chassis.

Pay attention to the following items before performing the work.

- Plan the work to prevent the board from bending.
- Use a torque screwdriver, to prevent over-tightening of the screws.
- The board may bend after mounting by reflow soldering, etc. Please note, as stress may be applied to the chips by forcibly flattening the board when tightening the screws.



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<Applicable to GMA or GMD Series>

## 9. Die Bonding/Wire Bonding

### 1. Die Bonding of Capacitors

- 1-1. Use the following materials for the Brazing alloys:  
Au-Sn (80/20) 300 to 320 °C in N<sub>2</sub> atmosphere
- 1-2. Mounting
  - (1) Control the temperature of the substrate so it matches the temperature of the brazing alloy.
  - (2) Place the brazing alloy on the substrate and place the capacitor on the alloy. Hold the capacitor and gently apply the load. Be sure to complete the operation within 1 minute.

### 2. Wire Bonding

- 2-1. Wire  
Gold wire: 25 micro m (0.001 inch) diameter
- 2-2. Bonding
  - (1) Thermo compression, ultrasonic ball bonding.
  - (2) Required stage temperature: 150 to 200 °C
  - (3) Required wedge or capillary weight: 0.2N to 0.5N
  - (4) Bond the capacitor and base substrate or other devices with gold wire.

## Other

### 1. Under Operation of Equipment

- 1-1. Do not touch a capacitor directly with bare hands during operation in order to avoid the danger of an electric shock.
- 1-2. Do not allow the terminals of a capacitor to come in contact with any conductive objects (short-circuit). Do not expose a capacitor to a conductive liquid, including any acid or alkali solutions.
- 1-3. Confirm the environment in which the equipment will operate is under the specified conditions. Do not use the equipment under the following environments.
  - (1) Being splattered with water or oil.
  - (2) Being exposed to direct sunlight.
  - (3) Being exposed to ozone, ultraviolet rays, or radiation.
  - (4) Being exposed to toxic gas (e.g., hydrogen sulfide, sulfur dioxide, chlorine, ammonia gas, etc.)
  - (5) Any vibrations or mechanical shocks exceeding the specified limits.
  - (6) Moisture condensing environments.
- 1-4. Use damp proof countermeasures if using under any conditions that can cause condensation.

### 2. Other

- 2-1. In an Emergency
  - (1) If the equipment should generate smoke, fire, or smell, immediately turn off or unplug the equipment.  
If the equipment is not turned off or unplugged, the hazards may be worsened by supplying continuous power.
  - (2) In this type of situation, do not allow face and hands to come in contact with the capacitor or burns may be caused by the capacitor's high temperature.

### 2-2. Disposal of Waste

When capacitors are disposed of, they must be burned or buried by an industrial waste vendor with the appropriate licenses.

### 2-3. Circuit Design

- (1) Addition of Fail Safe Function  
Capacitors that are cracked by dropping or bending of the board may cause deterioration of the insulation resistance, and result in a short. If the circuit being used may cause an electrical shock, smoke or fire when a capacitor is shorted, be sure to install fail-safe functions, such as a fuse, to prevent secondary accidents.
- (2) Capacitors used to prevent electromagnetic interference in the primary AC side circuit, or as a connection/insulation, must be a safety standard certified product, or satisfy the contents stipulated in the Electrical Appliance and Material Safety Law. Install a fuse for each line in case of a short.
- (3) The GJM, GMA, GMD, GQM, GR3, GRJ, GRM, KR3, KRM, LLA, LLL, LLM, LLR and ZRB series are not safety standard certified products.

### 2-4. Remarks

Failure to follow the cautions may result, worst case, in a short circuit and smoking when the product is used.

The above notices are for standard applications and conditions. Contact us when the products are used in special mounting conditions.

Select optimum conditions for operation as they determine the reliability of the product after assembly.

The data herein are given in typical values, not guaranteed ratings.

GRM Series  
GJM Series  
GMA Series  
GMD Series  
GQM Series  
GR3 Series  
GRJ Series  
LLA Series  
LLL Series  
LLM Series  
LLR Series  
KRM Series  
KR3 Series  
NFM Series  
GCH Series  
⚠Caution

## Notice

### Rating

#### 1. Operating Temperature

1. The operating temperature limit depends on the capacitor.

1-1. Do not apply temperatures exceeding the maximum operating temperature.

It is necessary to select a capacitor with a suitable rated temperature that will cover the operating temperature range.

It is also necessary to consider the temperature distribution in equipment and the seasonal temperature variable factor.

1-2. Consider the self-heating factor of the capacitor.

The surface temperature of the capacitor shall not exceed the maximum operating temperature including self-heating.

#### 2. Atmosphere Surroundings (gaseous and liquid)

1. Restriction on the operating environment of capacitors.

1-1. Capacitors, when used in the above, unsuitable,

operating environments may deteriorate due to the corrosion of the terminations and the penetration of moisture into the capacitor.

1-2. The same phenomenon as the above may occur when the electrodes or terminals of the capacitor are subject to moisture condensation.

1-3. The deterioration of characteristics and insulation resistance due to the oxidization or corrosion of terminal electrodes may result in breakdown when the capacitor is exposed to corrosive or volatile gases or solvents for long periods of time.

#### 3. Piezo-electric Phenomenon

1. When using high dielectric constant type capacitors in AC or pulse circuits, the capacitor itself vibrates at specific frequencies and noise may be generated.

Moreover, when the mechanical vibration or shock is added to the capacitor, noise may occur.

### Soldering and Mounting

#### 1. PCB Design

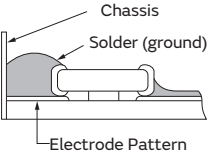
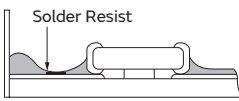
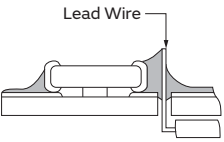
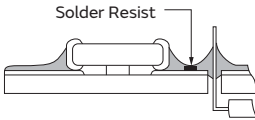
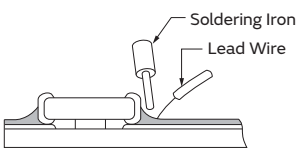
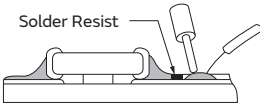
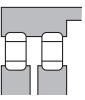
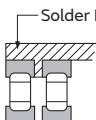
1. Notice for Pattern Forms

1-1. Unlike leaded components, chip components are susceptible to flexing stresses since they are mounted directly on the substrate. They are also more sensitive to mechanical and thermal stresses than leaded components. Excess solder fillet height can multiply these stresses and cause chip cracking. When designing substrates, take land patterns and dimensions into consideration to eliminate the possibility of excess solder fillet height.

1-2. There is a possibility of chip cracking caused by PCB expansion/contraction with heat, because stress on a chip is different depending on PCB material and structure. When the thermal expansion coefficient greatly differs between the board used for mounting and the chip, it will cause cracking of the chip due to the thermal expansion and contraction.

When capacitors are mounted on a fluorine resin printed circuit board or on a single-layered glass epoxy board, it may also cause cracking of the chip for the same reason.

#### Pattern Forms

|                                                   | Prohibited                                                                          | Correct                                                                               |
|---------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Placing Close to Chassis                          |  |  |
| Placing of Chip Components and Leaded Components  |  |  |
| Placing of Leaded Components after Chip Component |  |  |
| Lateral Mounting                                  |  |  |

Continued on the following page. ↗

## Notice

Continued from the preceding page. ↘

### 2. Land Dimensions

- 2-1. Chip capacitors can be cracked due to the stress of PCB bending, etc. if the land area is larger than needed and has an excess amount of solder. Please refer to the land dimensions in table 1 for flow soldering, table 2 for reflow soldering, table 3 for reflow soldering for ZRB Series, table 4 for reflow soldering for LLA Series, table 5 for reflow soldering for LLM Series. Please confirm the suitable land dimension by evaluating of the actual SET / PCB.

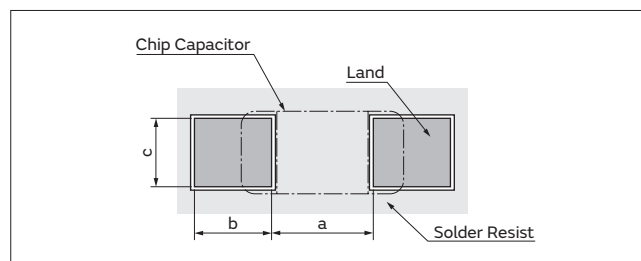


Table 1 Flow Soldering Method

| Series          | Chip Dimension Code (L/W) | Chip (L×W) | a          | b          | c          |
|-----------------|---------------------------|------------|------------|------------|------------|
| GQM/GR3/GRJ/GRM | 18                        | 1.6×0.8    | 0.6 to 1.0 | 0.8 to 0.9 | 0.6 to 0.8 |
| GQM/GR3/GRJ/GRM | 21                        | 2.0×1.25   | 1.0 to 1.2 | 0.9 to 1.0 | 0.8 to 1.1 |
| GR3/GRJ/GRM     | 31                        | 3.2×1.6    | 2.2 to 2.6 | 1.0 to 1.1 | 1.0 to 1.4 |
| LLL             | 21                        | 1.25×2.0   | 0.4 to 0.7 | 0.5 to 0.7 | 1.4 to 1.8 |
| LLL             | 31                        | 1.6×3.2    | 0.6 to 1.0 | 0.8 to 0.9 | 2.6 to 2.8 |

Flow soldering can only be used for products with a chip size from 1.6x0.8mm to 3.2x1.6mm.

(in mm)

Table 2 Reflow Soldering Method

| Series          | Chip Dimension Code (L/W) | Chip (L×W)              | a            | b            | c            |
|-----------------|---------------------------|-------------------------|--------------|--------------|--------------|
| GJM/GRM         | 02                        | 0.4×0.2                 | 0.16 to 0.2  | 0.12 to 0.18 | 0.2 to 0.23  |
| GJM/GRM         | 03                        | 0.6×0.3 (±0.03)         | 0.2 to 0.25  | 0.2 to 0.3   | 0.25 to 0.35 |
|                 |                           | 0.6×0.3 (±0.05)         | 0.2 to 0.25  | 0.25 to 0.35 | 0.3 to 0.4   |
|                 |                           | 0.6×0.3 (±0.09)         | 0.23 to 0.3  | 0.25 to 0.35 | 0.3 to 0.4   |
| GJM/GRM         | 15                        | 1.0×0.5 (within ±0.10)  | 0.3 to 0.5   | 0.35 to 0.45 | 0.4 to 0.6   |
|                 |                           | 1.0×0.5 (±0.15/±0.20)   | 0.4 to 0.6   | 0.4 to 0.5   | 0.5 to 0.7   |
| GQM/GR3/GRJ/GRM | 18                        | 1.6×0.8 (within ±0.10)  | 0.6 to 0.8   | 0.6 to 0.7   | 0.6 to 0.8   |
|                 |                           | 1.6×0.8 (±0.15/±0.20)   | 0.7 to 0.9   | 0.7 to 0.8   | 0.8 to 1.0   |
| GQM             | 21                        | 2.0×1.25                | 1.0 to 1.2   | 0.6 to 0.7   | 0.8 to 1.1   |
| GR3/GRJ/GRM     | 21                        | 2.0×1.25 (within ±0.10) | 1.2          | 0.6          | 1.25         |
|                 |                           | 2.0×1.25 (±0.15)        | 1.2          | 0.6 to 0.8   | 1.2 to 1.4   |
|                 |                           | 2.0×1.25 (±0.20)        | 1.0 to 1.4   | 0.6 to 0.8   | 1.2 to 1.4   |
| GR3/GRJ/GRM     | 31                        | 3.2×1.6 (within ±0.20)  | 1.8 to 2.0   | 0.9 to 1.2   | 1.5 to 1.7   |
|                 |                           | 3.2×1.6 (±0.30)         | 1.9 to 2.1   | 1.0 to 1.3   | 1.7 to 1.9   |
| GR3/GRJ/GRM     | 32                        | 3.2×2.5                 | 2.0 to 2.4   | 1.0 to 1.2   | 1.8 to 2.3   |
| GR3/GRJ/GRM     | 43                        | 4.5×3.2                 | 3.0 to 3.5   | 1.2 to 1.4   | 2.3 to 3.0   |
| GR3/GRJ/GRM     | 55                        | 5.7×5.0                 | 4.0 to 4.6   | 1.4 to 1.6   | 3.5 to 4.8   |
| LLL             | 15                        | 0.5×1.0                 | 0.15 to 0.2  | 0.2 to 0.25  | 0.7 to 1.0   |
| LLL             | 1U                        | 0.6×1.0                 | 0.20 to 0.25 | 0.25 to 0.35 | 0.7 to 1.0   |
| LLL/LLR         | 18                        | 0.8×1.6                 | 0.2 to 0.3   | 0.3 to 0.4   | 1.4 to 1.6   |
| LLL             | 21                        | 1.25×2.0                | 0.4 to 0.5   | 0.4 to 0.5   | 1.4 to 1.8   |
| LLL             | 31                        | 1.6×3.2                 | 0.6 to 0.8   | 0.6 to 0.7   | 2.6 to 2.8   |
| GQM             | 22                        | 2.8×2.8                 | 2.2 to 2.5   | 0.8 to 1.0   | 1.9 to 2.3   |

(in mm)

<Applicable to Part Number KR3/KRM>

| Series  | Chip Dimension Code (L/W) | Chip (L×W) | a          | b          | c          |
|---------|---------------------------|------------|------------|------------|------------|
| KRM     | 21                        | 2.0×1.25   | 1.0 to 1.2 | 0.6 to 0.7 | 0.8 to 1.1 |
| KRM     | 31                        | 3.2×1.6    | 2.2 to 2.4 | 0.8 to 0.9 | 1.0 to 1.4 |
| KR3/KRM | 55                        | 5.7×5.0    | 2.6        | 2.7        | 5.6        |

(in mm)

Continued on the following page. ↗

## Notice

Continued from the preceding page. ↘

**Table 3 ZRB Series Reflow Soldering Method**

| Seies | Chip Dimension Code (L/W) | Chip (L×W) | a          | b          | c          |
|-------|---------------------------|------------|------------|------------|------------|
| ZRB   | 15                        | 1.0×0.5    | 0.4 to 0.6 | 0.4 to 0.5 | 0.5 to 0.7 |
| ZRB   | 18*                       | 1.6×0.8    | 0.7 to 0.9 | 0.7 to 0.8 | 0.8 to 1.0 |

\*If distance between parts is too short, there is risk to cause electrical short. Please confirm the mounting pitch (distance between centers of parts) has 1.275mm or more. (ZRB18 only)

[Land for ZRB Series]

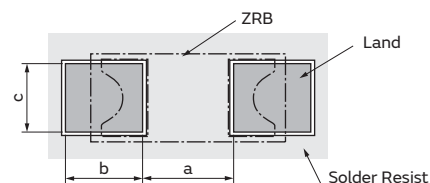


**Table 4 LLA Series Reflow Soldering Method**

| Seies | Chip Dimension Code (L/W) | Chip (L×W) | a          | b            | c            | p   |
|-------|---------------------------|------------|------------|--------------|--------------|-----|
| LLA   | 18                        | 1.6×0.8    | 0.3 to 0.4 | 0.25 to 0.35 | 0.15 to 0.25 | 0.4 |
| LLA   | 21                        | 2.0×1.25   | 0.5 to 0.7 | 0.35 to 0.6  | 0.2 to 0.3   | 0.5 |
| LLA   | 31                        | 3.2×1.6    | 0.7 to 0.9 | 0.4 to 0.7   | 0.3 to 0.4   | 0.8 |

(in mm)

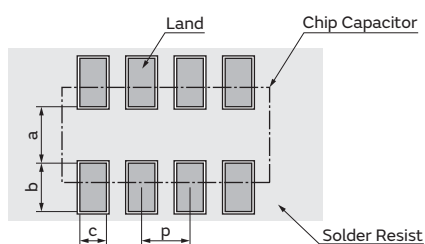
**Table 5 LLM Series Reflow Soldering Method**

| Seies | Chip Dimension Code (L/W) | Chip (L×W) | a          | b, b'        | c, c' | d          | e          | f          | p   |
|-------|---------------------------|------------|------------|--------------|-------|------------|------------|------------|-----|
| LLM   | 21                        | 2.0×1.25   | 0.6 to 0.8 | (0.3 to 0.5) | 0.3   | 2.0 to 2.6 | 1.3 to 1.8 | 1.4 to 1.6 | 0.5 |
| LLM   | 31                        | 3.2×1.6    | 1.0        | (0.3 to 0.5) | 0.4   | 3.2 to 3.6 | 1.6 to 2.0 | 2.6        | 0.8 |

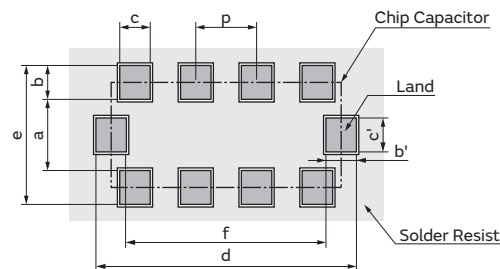
$$b=(c-e)/2, b'=(d-f)/2$$

(in mm)

[Land for LLA Series]



[Land for LLM Series]



### <Applicable to beyond Rated Voltage of 200VDC>

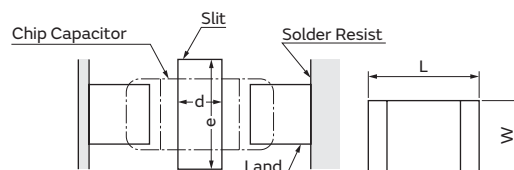
#### 2-2. Dimensions of Slit (Example)

Preparing the slit helps flux cleaning and resin coating on the back of the capacitor.

However, the length of the slit design should be as short as possible to prevent mechanical damage in the capacitor.

A longer slit design might receive more severe mechanical stress from the PCB.

Recommended slit design is shown in the Table.



| L×W      | d          | e          |
|----------|------------|------------|
| 1.6×0.8  | —          | —          |
| 2.0×1.25 | —          | —          |
| 3.2×1.6  | 1.0 to 2.0 | 3.2 to 3.7 |
| 3.2×2.5  | 1.0 to 2.0 | 4.1 to 4.6 |
| 4.5×2.0  | 1.0 to 2.8 | 3.6 to 4.1 |
| 4.5×3.2  | 1.0 to 2.8 | 4.8 to 5.3 |
| 5.7×2.8  | 1.0 to 4.0 | 4.4 to 4.9 |
| 5.7×5.0  | 1.0 to 4.0 | 6.6 to 7.1 |

(in mm)

Continued on the following page. ↗

## Notice

Continued from the preceding page. ↘

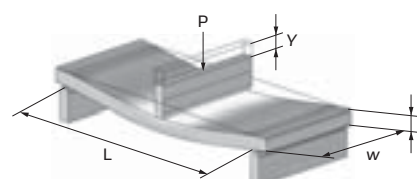
### 3. Board Design

When designing the board, keep in mind that the amount of strain which occurs will increase depending on the size and material of the board.

[Relationship with amount of strain to the board thickness, length, width, etc.]

$$\epsilon = \frac{3PL}{2Ewh^2} \quad \text{Relationship between load and strain}$$

$\epsilon$ : Strain on center of board ( $\mu\text{st}$ )  
 $L$ : Distance between supporting points (mm)  
 $w$ : Board width (mm)  
 $h$ : Board thickness (mm)  
 $E$ : Elastic modulus of board ( $\text{N/m}^2=\text{Pa}$ )  
 $Y$ : Deflection (mm)  
 $P$ : Load (N)



When the load is constant, the following relationship can be established.

- As the distance between the supporting points ( $L$ ) increases, the amount of strain also increases.  
→Reduce the distance between the supporting points.
  - As the elastic modulus ( $E$ ) decreases, the amount of strain increases.  
→Increase the elastic modulus.
  - As the board width ( $w$ ) decreases, the amount of strain increases.  
→Increase the width of the board.
  - As the board thickness ( $h$ ) decreases, the amount of strain increases.  
→Increase the thickness of the board.
- Since the board thickness is squared, the effect on the amount of strain becomes even greater.

### 2. Adhesive Application

- Thin or insufficient adhesive can cause the chips to loosen or become disconnected during flow soldering.

The amount of adhesive must be more than dimension  $c$ , shown in the drawing at right, to obtain the correct bonding strength.

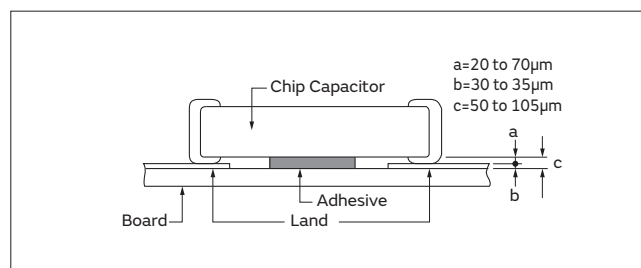
The chip's electrode thickness and land thickness must also be taken into consideration.

- Low viscosity adhesive can cause chips to slip after mounting. The adhesive must have a viscosity of  $5000\text{Pa} \cdot \text{s}$  ( $500\text{ps}$ ) min. (at  $25^\circ\text{C}$ ).

#### 3. Adhesive Coverage

| Size (L×W) (in mm) | Adhesive Coverage* |
|--------------------|--------------------|
| 1.6×0.8            | 0.05mg min.        |
| 2.0×1.25           | 0.1mg min.         |
| 3.2×1.6            | 0.15mg min.        |

\*Nominal Value



### 3. Adhesive Curing

- Insufficient curing of the adhesive can cause chips to disconnect during flow soldering and causes deterioration in the insulation resistance between the terminations due to moisture absorption.  
Control curing temperature and time in order to prevent insufficient hardening.

Continued on the following page. ↗

## Notice

Continued from the preceding page. ↘

### 4. Flux for Flow Soldering

1. An excessive amount of flux generates a large quantity of flux gas, which can cause a deterioration of solderability, so apply flux thinly and evenly throughout. (A foaming system is generally used for flow soldering.)
2. Flux containing too high a percentage of halide may cause corrosion of the terminations unless there is sufficient cleaning. Use flux with a halide content of 0.1% max.
3. Do not use strong acidic flux.

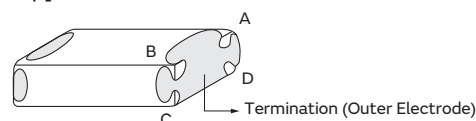
### 5. Flow Soldering

- Set temperature and time to ensure that leaching of the terminations does not exceed 25% of the chip end area as a single chip (full length of the edge A-B-C-D shown at right) and 25% of the length A-B shown as mounted on substrate.

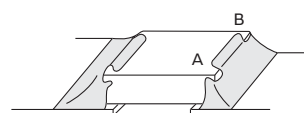
4. Do not use water-soluble flux.\*

(\*Water-soluble flux can be defined as non-rosin type flux including wash-type flux and non-wash-type flux.)

[As a Single Chip]



[As Mounted on Substrate]



### 6. Reflow Soldering

The halogen system substance and organic acid are included in solder paste, and a chip corrodes by this kind of solder paste.

Do not use strong acid flux.

Do not use water-soluble flux\*.

(\*Water-soluble flux can be defined as non-rosin type flux including wash-type flux and non-wash-type flux.)

### 7. Washing

1. Please evaluate the capacitor using actual cleaning equipment and conditions to confirm the quality, and select the solvent for cleaning.
2. Unsuitable cleaning solvent may leave residual flux or other foreign substances, causing deterioration of electrical characteristics and the reliability of the capacitors.

3. Select the proper cleaning conditions.

3-1. Improper cleaning conditions (excessive or insufficient) may result in deterioration of the performance of the capacitors.

### 8. Coating

1. A crack may be caused in the capacitor due to the stress of the thermal contraction of the resin during curing process.  
The stress is affected by the amount of resin and curing contraction.  
Select a resin with low curing contraction.  
The difference in the thermal expansion coefficient between a coating resin or a molding resin and the capacitor may cause the destruction and deterioration of the capacitor such as a crack or peeling, and lead to the deterioration of insulation resistance or dielectric breakdown.  
Select a resin for which the thermal expansion coefficient is as close to that of the capacitor as possible.  
A silicone resin can be used as an under-coating to buffer against the stress.

2. Select a resin that is less hygroscopic.  
Using hygroscopic resins under high humidity conditions may cause the deterioration of the insulation resistance of a capacitor.  
An epoxy resin can be used as a less hygroscopic resin.
3. The halogen system substance and organic acid are included in coating material, and a chip corrodes by the kind of Coating material.  
Do not use strong acid type.

<Applicable to ZRB Series>

4. Loss suppress acoustic noise may be caused in ZRB series due to the resin during curing process. Please contact our sales representative or product engineers on the apply to resin during curing process.

Continued on the following page. ↗

## Notice

Continued from the preceding page. ↘

### Other

#### 1. Transportation

1. The performance of a capacitor may be affected by the conditions during transportation.
  - 1-1. The capacitors shall be protected against excessive temperature, humidity, and mechanical force during transportation.
    - (1) Climatic condition
      - low air temperature: -40°C
      - change of temperature air/air: -25°C/+25°C
      - low air pressure: 30 kPa
      - change of air pressure: 6 kPa/min.
    - (2) Mechanical condition
 

Transportation shall be done in such a way that the boxes are not deformed and forces are not directly passed on to the inner packaging.
  - 1-2. Do not apply excessive vibration, shock, or pressure to the capacitor.
    - (1) When excessive mechanical shock or pressure is applied to a capacitor, chipping or cracking may occur in the ceramic body of the capacitor.
    - (2) When the sharp edge of an air driver, a soldering iron, tweezers, a chassis, etc. impacts strongly on the surface of the capacitor, the capacitor may crack and short-circuit.
  - 1-3. Do not use a capacitor to which excessive shock was applied by dropping, etc.  
A capacitor dropped accidentally during processing may be damaged.

#### 2. Characteristics Evaluation in the Actual System

1. Evaluate the capacitor in the actual system, to confirm that there is no problem with the performance and specification values in a finished product before using.
2. Since a voltage dependency and temperature dependency exists in the capacitance of high dielectric type ceramic capacitors, the capacitance may change depending on the operating conditions in the actual system. Therefore, be sure to evaluate the various characteristics, such as the leakage current and noise absorptivity, which will affect the capacitance value of the capacitor.
3. In addition, voltages exceeding the predetermined surge may be applied to the capacitor by the inductance in the actual system. Evaluate the surge resistance in the actual system as required.

## NFM

## ⚠Caution/Notice/Soldering and Mounting

### ⚠Caution

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Soldering and Mounting ..... 179

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### Soldering and Mounting

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4. Cleaning ..... 184



## Rating

Do not use products beyond the rated current and rated voltage as this may create excessive heat and deteriorate the insulation resistance.

## Soldering and Mounting

### 1. Self-heating

Please provide special attention when mounting chip EMIFIL<sup>®</sup> NFM□□P/K series in close proximity to other products that radiate heat.

The heat generated by other products may deteriorate the insulation resistance and cause excessive heat in this component.

GRM Series

GJM Series

GMA Series

GMD Series

GQM Series

GR3 Series

GRJ Series

LLA Series

LLL Series

LLM Series

LLR Series

KRM Series

KR3 Series

NFM Series

GCH Series

⚠Caution

## Notice

### Storage and Operating Conditions

#### <Operating Environment>

Do not use products in a chemical atmosphere such as chlorine gas, acid or sulfide gas.

Do not use products in the environment close to the organic solvent.

#### <Storage and Handling Requirements>

##### 1. Storage Period

Should be used within 12 months.

Solderability should be checked if this period is exceeded.

##### 2. Storage Conditions

(1) Storage temperature: -10 to +40°C

Relative humidity: 15 to 85%

Avoid sudden changes in temperature and humidity.

(2) Do not store products in a chemical atmosphere such as chlorine gas, acid or sulfide gas.

### Notice (Soldering and Mounting)

#### 1. Cleaning

Failure and degradation of a product are caused by the cleaning method. When you clean in conditions that are not in mounting information, please contact Murata engineering.

#### 2. Soldering

Reliability decreases with improper soldering methods.

Please solder by the standard soldering conditions shown in mounting information.

#### 3. Points of Attention about NFM Pattern Forms

The loaded stresses are different to a chip depend on PCB materials and structures.

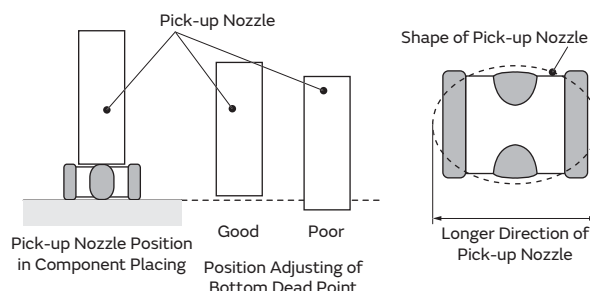
When the chip will be mounted on the metal PCB contained alumina material, PCB heat expansion/contraction will be a cause of chip cracks because the coefficients of thermal expressions are different between metal PCB and the chip itself.

In case of mounting 0402 or smaller size of NFM on single-layered glass epoxy board, chip cracks will be also occurred because of the same reason.

#### 4. Component Mounting: 0402 size or smaller of NFM

If low bottom dead point of the pick-up nozzle is too low, chip cracks will be occurred because an extra power will be added to the chip during mounting. Therefore, the bottom dead point of pick-up nozzle must be set on/over the upper

surface of the PCB. Adjusting is required when the bottom dead point will be set by correcting board warp. It is recommended that using the larger pick-up nozzle than chip length for avoiding what force impact will be centered to the middle point of components. Before assembling, please confirm its mounting accuracy under the best condition.



##### 5. Other

Noise suppression levels resulting from Murata's EMI suppression filters EMIFIL® may vary, depending on the circuits and ICs used, type of noise, mounting pattern, mounting location, and other operating conditions. Be sure to check and confirm in advance the noise suppression effect of each filter, in actual circuits, etc. before applying the filter in a commercial-purpose equipment design.

### Handling

#### 1. Resin Coating

Using resin for coating/molding products may affect the products performance.

So please pay careful attention in selecting resin.

Prior to use, please make the reliability evaluation with the product mounted in your application set.

#### 2. Handling of a Substrate

After mounting products on a substrate, do not apply any stress to the product caused by bending or twisting to the substrate when cropping the substrate, inserting and removing a connector from the substrate or tightening screw to the substrate.

Excessive mechanical stress may cause cracking in the Product.



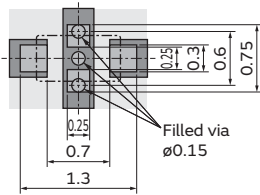
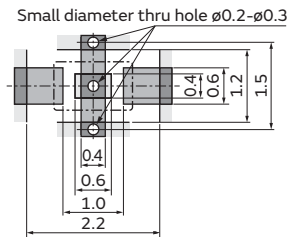
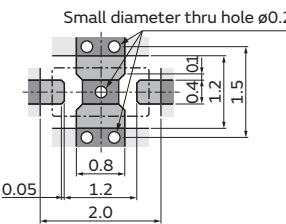
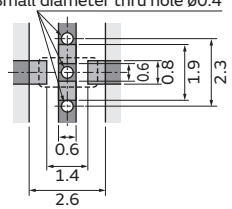
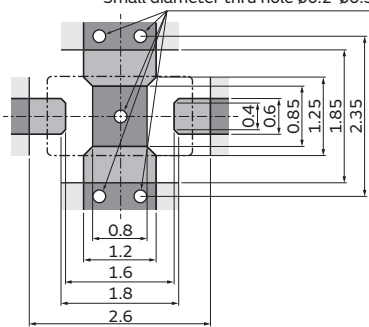
## Soldering and Mounting

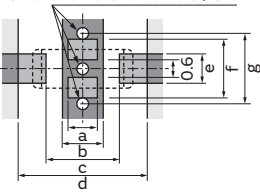
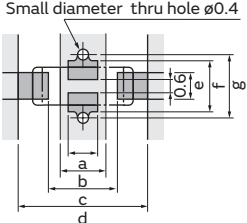
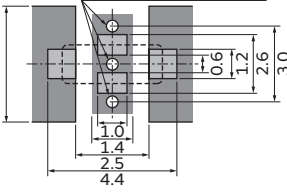
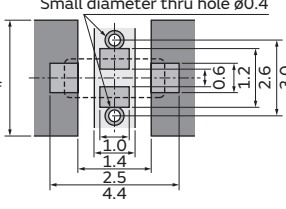
### 1. Standard Land Pattern Dimensions

NFM series suppress noise by conducting the high-frequency noise element to ground. Therefore, to obtain maximum performance from these filters, the ground pattern should be made as large as possible during the PCB design stage. As shown below, one side of the PCB is used for chip mounting, and the other is used for grounding.

Small diameter feedthrough holes are then used to connect the grounds on each side of the PCB. This reduces the high-frequency impedance of the grounding and maximizes the filter's performance.

Land Pattern + Solder Resist  
Land Pattern  
Solder Resist  
(in mm)

|                                                                                      |                                                                                                                                               |  |                                                                                                                                                 |  |                                                                                     |  |         |  |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|---------|--|
| NFM15CC<br>NFM15PC<br>NFM18CC<br>NFM18PC<br>NFM18PS<br>NFM21CC<br>NFM21PC<br>NFM21PS | ● Reflow Soldering                                                                                                                            |  | NFM15CC/NFM15PC                                                                                                                                 |  | NFM18CC/NFM18PC                                                                     |  | NFM18PS |  |
|                                                                                      |                                                              |  |                                                               |  |  |  |         |  |
|                                                                                      | NFM21CC/NFM21PC<br>Small diameter thru hole $\phi 0.4$<br> |  | NFM21PS<br>Small diameter thru hole $\phi 0.2-\phi 0.3$<br> |  |                                                                                     |  |         |  |
| Please contact us if using thinner land pad than 18 $\mu$ m.                         |                                                                                                                                               |  |                                                                                                                                                 |  |                                                                                     |  |         |  |

| NFM3DCC<br>NFM3DPC<br>NFM31PC<br>NFM31KC<br>NFM41CC<br>NFM41PC                                                                                                           | ● Reflow Soldering                                                                                                                                                    |                                                                                                                                                                                                             | Chip mounting side                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                           | ● Flow Soldering |                                                                                                                                                                                                             | Chip mounting side |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |             |           |  |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--|--|--|--|--|---|---|---|---|---|---|---|---------|-----|-----|-----|-----|-----|-----|-----|---------|-----|-----|-----|-----|-----|-----|-----|---------|-----|-----|-----|-----|-----|-----|-----|---------|-----|-----|-----|-----|-----|-----|-----|---------|-----|-----|-----|-----|-----|-----|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------|-----------|--|--|--|--|--|--|---|---|---|---|---|---|---|---------|-----|-----|-----|-----|-----|-----|-----|---------|-----|-----|-----|-----|-----|-----|-----|---------|-----|-----|-----|-----|-----|-----|-----|---------|-----|-----|-----|-----|-----|-----|-----|---------|-----|-----|-----|-----|-----|-----|-----|
|                                                                                                                                                                          | NFM3DCC/NFM3DPC/NFM31PC/NFM41CC/NFM41PC<br>Small diameter thru hole $\phi 0.4$<br> |                                                                                                                                                                                                             | <table><tr><th rowspan="2">Part Number</th><th colspan="7">Size (mm)</th></tr><tr><th>a</th><th>b</th><th>c</th><th>d</th><th>e</th><th>f</th><th>g</th></tr><tr><td>NFM3DCC</td><td>1.0</td><td>1.4</td><td>2.5</td><td>4.4</td><td>1.0</td><td>2.0</td><td>2.4</td></tr><tr><td>NFM3DPC</td><td>1.0</td><td>1.4</td><td>2.5</td><td>4.4</td><td>1.2</td><td>2.6</td><td>3.0</td></tr><tr><td>NFM31PC</td><td>1.0</td><td>1.4</td><td>2.5</td><td>4.4</td><td>1.2</td><td>2.6</td><td>3.0</td></tr><tr><td>NFM41CC</td><td>1.5</td><td>2.0</td><td>3.5</td><td>6.0</td><td>1.2</td><td>2.6</td><td>3.0</td></tr><tr><td>NFM41PC</td><td>1.5</td><td>2.0</td><td>3.5</td><td>6.0</td><td>1.2</td><td>2.6</td><td>3.0</td></tr></table> |                                                                                                                                                                           | Part Number      | Size (mm)                                                                                                                                                                                                   |                    |  |  |  |  |  | a | b | c | d | e | f | g | NFM3DCC | 1.0 | 1.4 | 2.5 | 4.4 | 1.0 | 2.0 | 2.4 | NFM3DPC | 1.0 | 1.4 | 2.5 | 4.4 | 1.2 | 2.6 | 3.0 | NFM31PC | 1.0 | 1.4 | 2.5 | 4.4 | 1.2 | 2.6 | 3.0 | NFM41CC | 1.5 | 2.0 | 3.5 | 6.0 | 1.2 | 2.6 | 3.0 | NFM41PC | 1.5 | 2.0 | 3.5 | 6.0 | 1.2 | 2.6 | 3.0 | NFM3DCC/NFM3DPC/NFM31PC/NFM41CC/NFM41PC<br>Small diameter thru hole $\phi 0.4$<br> |  | <table><tr><th rowspan="2">Part Number</th><th colspan="7">Size (mm)</th></tr><tr><th>a</th><th>b</th><th>c</th><th>d</th><th>e</th><th>f</th><th>g</th></tr><tr><td>NFM3DCC</td><td>1.0</td><td>1.4</td><td>2.5</td><td>4.4</td><td>1.0</td><td>2.0</td><td>2.4</td></tr><tr><td>NFM3DPC</td><td>1.0</td><td>1.4</td><td>2.5</td><td>4.4</td><td>1.2</td><td>2.6</td><td>3.0</td></tr><tr><td>NFM31PC</td><td>1.0</td><td>1.4</td><td>2.5</td><td>4.4</td><td>1.2</td><td>2.6</td><td>3.0</td></tr><tr><td>NFM41CC</td><td>1.5</td><td>2.0</td><td>3.5</td><td>6.0</td><td>1.2</td><td>2.6</td><td>3.0</td></tr><tr><td>NFM41PC</td><td>1.5</td><td>2.0</td><td>3.5</td><td>6.0</td><td>1.2</td><td>2.6</td><td>3.0</td></tr></table> |  | Part Number | Size (mm) |  |  |  |  |  |  | a | b | c | d | e | f | g | NFM3DCC | 1.0 | 1.4 | 2.5 | 4.4 | 1.0 | 2.0 | 2.4 | NFM3DPC | 1.0 | 1.4 | 2.5 | 4.4 | 1.2 | 2.6 | 3.0 | NFM31PC | 1.0 | 1.4 | 2.5 | 4.4 | 1.2 | 2.6 | 3.0 | NFM41CC | 1.5 | 2.0 | 3.5 | 6.0 | 1.2 | 2.6 | 3.0 | NFM41PC | 1.5 | 2.0 | 3.5 | 6.0 | 1.2 | 2.6 | 3.0 |
|                                                                                                                                                                          | Part Number                                                                                                                                                           | Size (mm)                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                           |                  |                                                                                                                                                                                                             |                    |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |             |           |  |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |
| a                                                                                                                                                                        |                                                                                                                                                                       | b                                                                                                                                                                                                           | c                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | d                                                                                                                                                                         | e                | f                                                                                                                                                                                                           | g                  |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |             |           |  |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |
| NFM3DCC                                                                                                                                                                  | 1.0                                                                                                                                                                   | 1.4                                                                                                                                                                                                         | 2.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 4.4                                                                                                                                                                       | 1.0              | 2.0                                                                                                                                                                                                         | 2.4                |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |             |           |  |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |
| NFM3DPC                                                                                                                                                                  | 1.0                                                                                                                                                                   | 1.4                                                                                                                                                                                                         | 2.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 4.4                                                                                                                                                                       | 1.2              | 2.6                                                                                                                                                                                                         | 3.0                |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |             |           |  |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |
| NFM31PC                                                                                                                                                                  | 1.0                                                                                                                                                                   | 1.4                                                                                                                                                                                                         | 2.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 4.4                                                                                                                                                                       | 1.2              | 2.6                                                                                                                                                                                                         | 3.0                |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |             |           |  |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |
| NFM41CC                                                                                                                                                                  | 1.5                                                                                                                                                                   | 2.0                                                                                                                                                                                                         | 3.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 6.0                                                                                                                                                                       | 1.2              | 2.6                                                                                                                                                                                                         | 3.0                |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |             |           |  |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |
| NFM41PC                                                                                                                                                                  | 1.5                                                                                                                                                                   | 2.0                                                                                                                                                                                                         | 3.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 6.0                                                                                                                                                                       | 1.2              | 2.6                                                                                                                                                                                                         | 3.0                |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |             |           |  |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |
| Part Number                                                                                                                                                              | Size (mm)                                                                                                                                                             |                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                           |                  |                                                                                                                                                                                                             |                    |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |             |           |  |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |
|                                                                                                                                                                          | a                                                                                                                                                                     | b                                                                                                                                                                                                           | c                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | d                                                                                                                                                                         | e                | f                                                                                                                                                                                                           | g                  |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |             |           |  |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |
| NFM3DCC                                                                                                                                                                  | 1.0                                                                                                                                                                   | 1.4                                                                                                                                                                                                         | 2.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 4.4                                                                                                                                                                       | 1.0              | 2.0                                                                                                                                                                                                         | 2.4                |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |             |           |  |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |
| NFM3DPC                                                                                                                                                                  | 1.0                                                                                                                                                                   | 1.4                                                                                                                                                                                                         | 2.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 4.4                                                                                                                                                                       | 1.2              | 2.6                                                                                                                                                                                                         | 3.0                |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |             |           |  |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |
| NFM31PC                                                                                                                                                                  | 1.0                                                                                                                                                                   | 1.4                                                                                                                                                                                                         | 2.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 4.4                                                                                                                                                                       | 1.2              | 2.6                                                                                                                                                                                                         | 3.0                |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |             |           |  |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |
| NFM41CC                                                                                                                                                                  | 1.5                                                                                                                                                                   | 2.0                                                                                                                                                                                                         | 3.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 6.0                                                                                                                                                                       | 1.2              | 2.6                                                                                                                                                                                                         | 3.0                |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |             |           |  |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |
| NFM41PC                                                                                                                                                                  | 1.5                                                                                                                                                                   | 2.0                                                                                                                                                                                                         | 3.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 6.0                                                                                                                                                                       | 1.2              | 2.6                                                                                                                                                                                                         | 3.0                |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |             |           |  |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |
| NFM31KC*1<br>Small diameter thru hole $\phi 0.4$<br>10mm or more (in case of 10A)<br> |                                                                                                                                                                       | *1 For large current design, width of signal land pattern should be wider not less than 1mm per 1A (1mm/A). For example, in case of 10A, signal land pattern width should be 10mm or more. (1mm/A*10A=10mm) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | NFM31KC*1<br>Small diameter thru hole $\phi 0.4$<br>10mm or more (in case of 10A)<br> |                  | *1 For large current design, width of signal land pattern should be wider not less than 1mm per 1A (1mm/A). For example, in case of 10A, signal land pattern width should be 10mm or more. (1mm/A*10A=10mm) |                    |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |             |           |  |  |  |  |  |  |   |   |   |   |   |   |   |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |         |     |     |     |     |     |     |     |

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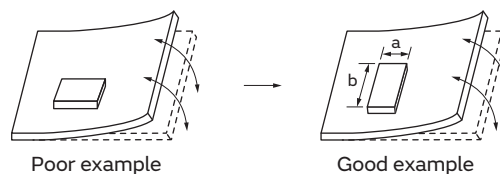
## Soldering and Mounting

Continued from the preceding page. ↘

### ● PCB Warping

PCB should be designed so that products are not subjected to the mechanical stress caused by warping the board.

Products should be located in the sideways direction (Length:  $a < b$ ) to the mechanical stress.



## 2. Solder Paste Printing and Adhesive Application

When reflow soldering the chip EMI suppression filter, the printing must be conducted in accordance with the following cream solder printing conditions.

If too much solder is applied, the chip will be prone to damage by mechanical and thermal stress from the PCB and may crack.

Standard land dimensions should be used for resist and copper foil patterns.

When flow soldering the EMI suppression filter, apply the adhesive in accordance with the following conditions. If too much adhesive is applied, then it may overflow into the land or termination areas and yield poor solderability. In contrast, if insufficient adhesive is applied, or if the adhesive is not sufficiently hardened, then the chip may become detached during flow soldering process.

(in mm)

| Series                                                                                                                                                                                                                                                   | Solder Paste Printing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Adhesive Application                                                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>NFM15CC</b><br><b>NFM15PC</b><br><b>NFM18CC</b><br><b>NFM18PC</b><br><b>NFM18PS</b><br><b>NFM21CC</b><br><b>NFM21PC</b><br><b>NFM21PS</b><br><b>NFM3DCC</b><br><b>NFM3DPC</b><br><b>NFM31PC</b><br><b>NFM31KC</b><br><b>NFM41CC</b><br><b>NFM41PC</b> | <p>● Guideline of solder paste thickness:<br/>100-150μm: NFM15/18/21/3D/31<br/>100-200μm: NFM41</p> <div style="display: flex; justify-content: space-around;"> <div> <p>NFM15CC/15PC</p> </div> <div> <p>NFM18CC/18PC</p> </div> </div> <div style="display: flex; justify-content: space-around;"> <div> <p>NFM18PS</p> </div> <div> <p>NFM21CC/21PC</p> </div> </div> <div style="display: flex; justify-content: space-around;"> <div> <p>NFM21PS</p> </div> <div> <p>NFM3DCC/3DPC</p> </div> </div> <div style="display: flex; justify-content: space-around;"> <div> <p>NFM31PC/31KC</p> </div> <div> <p>NFM41CC/41PC</p> </div> </div> | <p>■ NFM3D/31/41 Series<br/>Apply 0.1mg for NFM41C/41 and 0.06mg for NFM3D/NFM31 of bonding agent at each chip. Do not cover electrodes.</p> <div style="display: flex; justify-content: space-around;"> </div> |

Continued on the following page. ↗

## Soldering and Mounting

Continued from the preceding page. ↘

### 3. Standard Soldering Conditions

#### (1) Soldering Methods

Use flow and reflow soldering methods only.

Use standard soldering conditions when soldering chip EMI suppression filters.

In cases where several different parts are soldered, each having different soldering conditions, use those conditions requiring the least heat and minimum time.

Solder: Use Sn-3.0Ag-0.5Cu solder. Use of Sn-Zn based solder will deteriorate performance of products.

If using NFM series with Sn-Zn based solder, please contact Murata in advance.

Flux:

- Use Rosin-based flux.

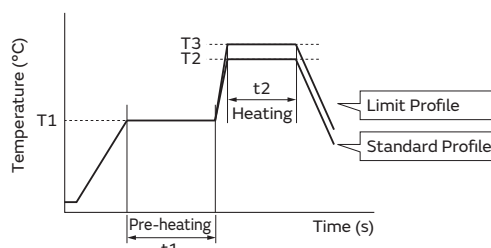
In case of using RA type solder, products should be cleaned completely with no residual flux.

- Do not use strong acidic flux (with chlorine content exceeding 0.20wt%)
- Do not use water-soluble flux.

For additional mounting methods, please contact Murata.

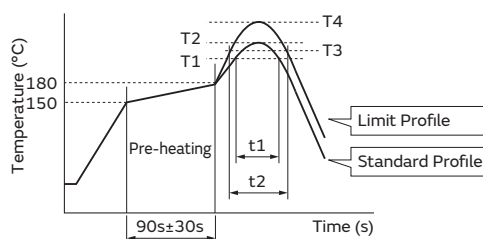
#### (2) Soldering Profile

- Flow Soldering Profile (Sn-3.0Ag-0.5Cu Solder)



| Series      | Pre-heating |            | Standard Profile |            |               | Limit Profile |            |               |
|-------------|-------------|------------|------------------|------------|---------------|---------------|------------|---------------|
|             | Temp. (T1)  | Time. (t1) | Temp. (T2)       | Time. (t2) | Cycle of Flow | Temp. (T3)    | Time. (t2) | Cycle of Flow |
| NFM3D/31/41 | 150°C       | 60s min.   | 250°C            | 4 to 6s    | 2 times max.  | 265±3°C       | 5s max.    | 2 times max.  |

- Reflow Soldering Profile (Sn-3.0Ag-0.5Cu Solder)



| Series | Standard Profile |            |                       |                 | Limit Profile |            |                       |                 |
|--------|------------------|------------|-----------------------|-----------------|---------------|------------|-----------------------|-----------------|
|        | Temp. (T1)       | Time. (t1) | Peak Temperature (T2) | Cycle of Reflow | Temp. (T3)    | Time. (t2) | Peak Temperature (T4) | Cycle of Reflow |
| NFM    | 220°C min.       | 30 to 60s  | 245±3°C               | 2 times max.    | 230°C min.    | 60s max.   | 260°C/10s             | 2 times max.    |

#### (3) Reworking with Solder Iron

The following conditions must be strictly followed when using a soldering iron.

Pre-heating: 150°C 60s min.

Soldering iron power output / Tip diameter:

30W max. / ø3mm max.\*<sup>1</sup>

\*<sup>1</sup> NFM15: 30W max. / ø2mm max.

Temperature of soldering iron tip / Soldering time / Times:

350°C max. / 3-4s / 2 times\*<sup>2</sup>

\*<sup>2</sup> NFM15: 340°C max. / 3-4s / 1 time

Do not allow the tip of the soldering iron to directly contact the chip.

For additional methods of reworking with a soldering iron, please contact Murata engineering.

Continued on the following page. ↗

## Soldering and Mounting

Continued from the preceding page. ↘

### 4. Cleaning

Following conditions should be observed when cleaning chip EMI filter.

(1) Cleaning Temperature: 60°C max. (40°C max. for alcohol type cleaner)

(2) Ultrasonic

Output: 20W/liter max.

Duration: 5 minutes max.

Frequency: 28 to 40kHz

(3) Cleaning Agent

The following list of cleaning agents have been tested on the individual components. Evaluation of final assembly should be completed prior to production.

(a) Alcohol cleaning agent

Isopropyl alcohol (IPA)

(b) Aqueous cleaning agent

Pine Alpha ST-100S

(4) Ensure that flux residue is completely removed.

Component should be thoroughly dried after aqueous agent has been removed with deionized water.

# Design Support Tool "SimSurfing"

<http://www.murata.com/simsurfing/>

This is the latest tool to get the electrical characteristics for Capacitors, Inductors, and EMI Suppression Filters, and to simulate Thermistors' behavior !



## ■ Characteristics viewer

You can easily search and download the following data for Monolithic Ceramic Capacitors, Polymer Capacitors, EMI Suppression Filters (Three-terminal Capacitors, Ferrite Beads) and Power/RF Inductors.

## ■ Components performance simulator

You can search by the simulation on simple circuits for Thermistors.

## ■ Selection tool

You can select Medium voltage Capacitors and Power Inductors according to conditions of use.

\* Medium voltage: Rated Voltage 250V and over

## ■ Search tool

You can search the Murata timing device (CERALOCK® and crystal units) that is most suitable for your IC and access information about the recommended circuit constant setting.

If you register as a "my Murata" user

(<https://my.murata.com/en/web/mymurata/>), you can use Enhanced SimSurfing.

## ■ Usage example of "Monolithic Ceramic Capacitors"

### 1 Select the products

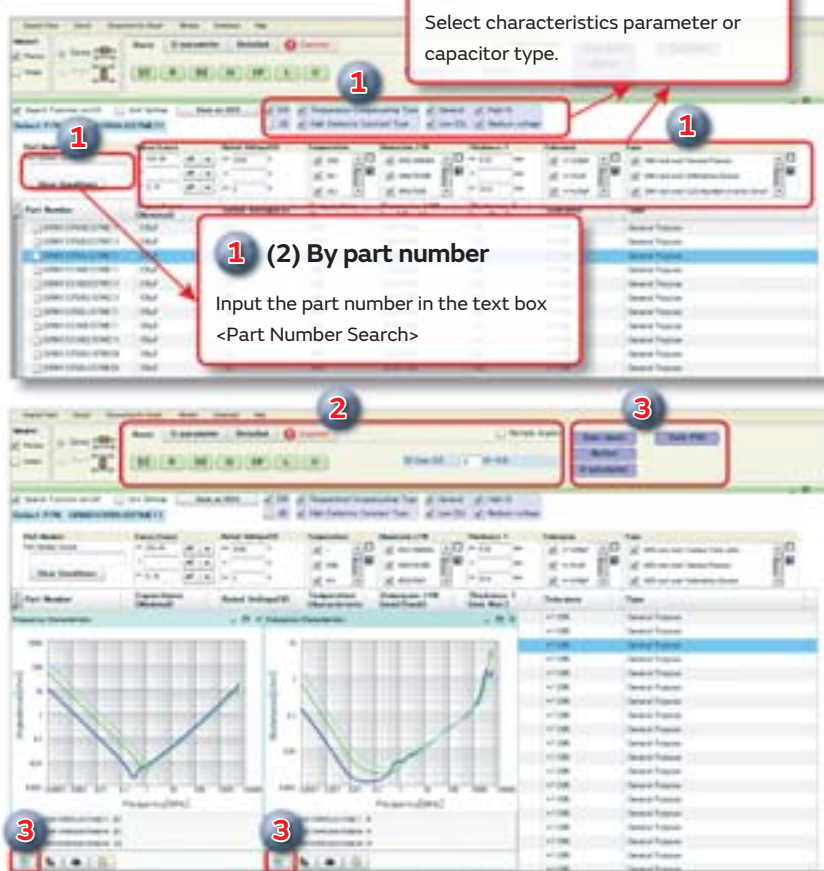
- (1) By performance/type
- (2) By part number

### 2 Show graph

Click each button on each tab of [Basic], [S-parameter] and [Detailed].

### 3 Data download

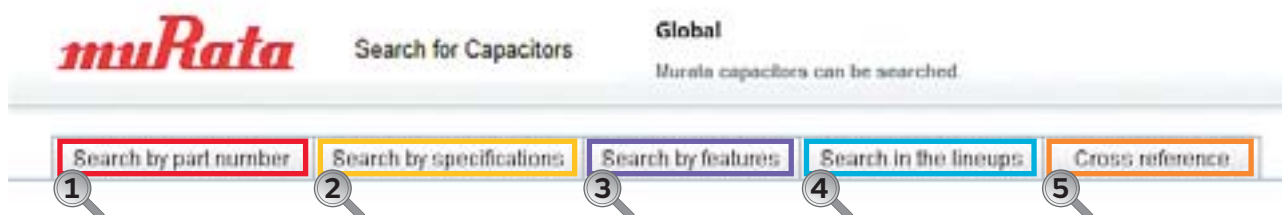
- Click each purple button in this area.
- Click "CSV output" button.



\* Images are as of October 2015. Be assured that this software will be updated frequently.

<http://www.murata.com/simsurfing/>

# Capacitor Website Introduction

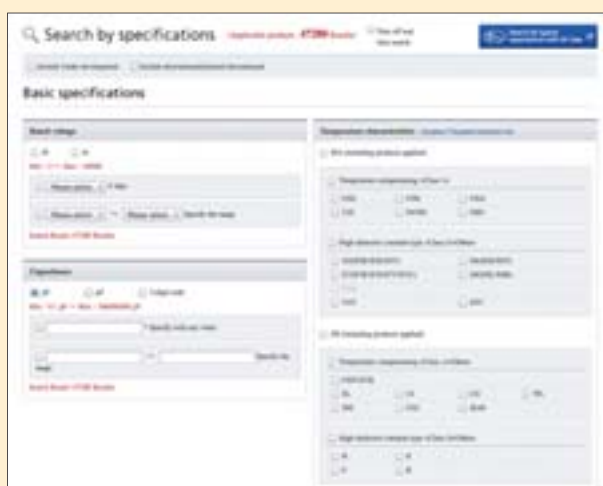


## 1 Search by part number <http://psearch.murata.com/capacitor/partnumber/>



The applicable capacitors can be searched by alphanumeric characters. Although the alternative symbol "#" is used for the package specification code, you can also enter the full package specification code to search the part number including the package specification code.

## 2 Search by specifications <http://psearch.murata.com/capacitor/spec/>



Capacitors can be searched by various specifications, such as the capacitance, rated voltage, and temperature characteristics.

### Basic specifications

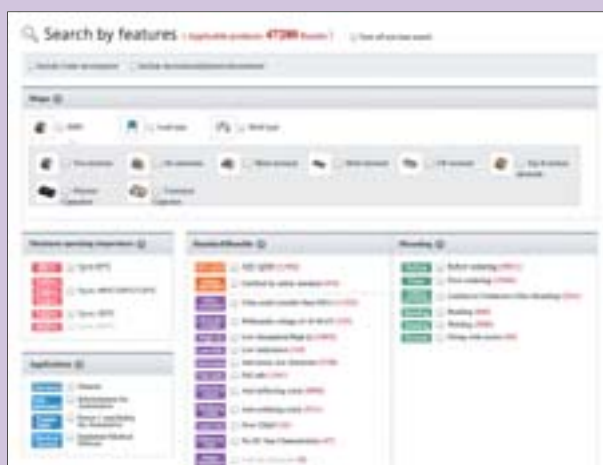
Applicable products can be searched by any value and specified range.

To support the entry, the minimum and maximum values of the product applicable to the conditions selected in the other items will be displayed.

### Add detailed specifications

Setting the conditions particular to the SMD, mold and lead, enables you to search the product with a more detailed specification.

## 3 Search by features <http://psearch.murata.com/capacitor/feature/>



The applicable capacitors can be searched by the Shape, Maximum operating temperature, Applications, Benefits, and Mounting.

Select the conditions of the following items to search for a product.

- "Shape"
- "Maximum operating temperature"
- "Applications"
- "Benefits"
- "Mounting"

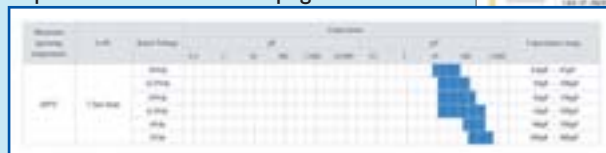


## Search in the lineup <http://psearch.murata.com/capacitor/lineup/>

Capacitors applicable to the conditions can be searched from the lineup of each series.

The features and applications of the series can also be checked in the Series page.

Capacitance chart in Series page



## Cross reference <http://cross-reference.murata.com/capacitor/crossreference/index.cfm>



The Murata part number applicable to the assumed specification can be searched by the competitor's part number of the chip monolithic ceramic capacitors.

### [Search result]

NEW

It is possible to characteristic comparison.

**Search result of SMD** (Applicable products: 43504 results)

- The number of cases applicable to the current search conditions is always displayed in real time.
- Click each search condition button to display the menu. The search results will change in real time with the selected conditions.
- Clicking the "Current search conditions" opens a menu, and the current narrowed down conditions can be checked.
- The results can be sorted by clicking the ▲ button of the search results items.
- Clicking the product name opens the details page, and more detailed information can be acquired.
- Detailed specifications sheet can be downloaded without opening the details page.
- The icons clearly indicate the status and the features of the product.

# Global Locations

For details please visit [www.murata.com](http://www.murata.com)



## ⚠ Note

### 1 Export Control

#### For customers outside Japan:

No Murata products should be used or sold, through any channels, for use in the design, development, production, utilization, maintenance or operation of, or otherwise contribution to (1) any weapons (Weapons of Mass Destruction [nuclear, chemical or biological weapons or missiles] or conventional weapons) or (2) goods or systems specially designed or intended for military end-use or utilization by military end-users.

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- ① Aircraft equipment
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- ③ Undersea equipment
- ④ Power plant equipment
- ⑤ Medical equipment
- ⑥ Transportation equipment (vehicles, trains, ships, etc.)
- ⑦ Traffic signal equipment
- ⑧ Disaster prevention / crime prevention equipment
- ⑨ Data-processing equipment
- ⑩ Application of similar complexity and/or reliability requirements to the applications listed above

3 Product specifications in this catalog are as of August 2016. They are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering. If there are any questions, please contact our sales representatives or product engineers.

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5 This catalog has only typical specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.

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- ✓ Alternative Solution
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