



**THE DATASHEET OF  
SFAJC2000153MX1**





| Electrical Details           |  |
|------------------------------|--|
| Electrical Configuration     | C Filter   |
| Capacitance Measurement      | @ 1000hr Point   |
| Current Rating               | 10A  |
| Insulation Resistance (IR)   | 10GΩ or 1000ΩF   |
| Temperature Rating           | -55°C to +125°C  |
| Ferrite Inductance (Typical) | Not Applicable   |
| Mechanical Details           |  |
| Head (A/F)                   | 4.0mm (0.157")   |
| Nut A/F                      | 4.0mm (0.187")   |
| Washer diameter              | 6.9mm (0.272")   |
| Mounting Torque              | 0.25Nm (2.21lbf in) max. if using nut<br>0.15Nm (1.32lbf in) max. into tapped hole |
| Mounting Hole Diameter       | 3.15mm ±0.1 (0.124" ±0.004")   |
| Max. Panel Thickness         | 3.2mm (0.126")   |
| Weight (Typical)             | 0.5g (0.017oz)   |
| Finish                       | Silver plate on copper undercoat   |

| Product Code   | Capacitance (±20%) UOS | Dielectric | Rated Voltage (Vdc) | DWV (Vdc) | Typical No-Load Insertion Loss (dB) |        |      |       |        |      |   |    |    |
|----------------|------------------------|------------|---------------------|-----------|-------------------------------------|--------|------|-------|--------|------|---|----|----|
|                |                        |            |                     |           | 0.01MHz                             | 0.1MHz | 1MHz | 10MHz | 100MHz | 1GHz |   |    |    |
| *SFAJ5000100ZC | 10pF -20% / +80%       | COG/NPO    | 500#                | 750       | -                                   | -      | -    | -     | -      | 4    |   |    |    |
| SFAJ5000150ZC  | 15pF -20% / +80%       |            |                     |           | -                                   | -      | -    | -     | -      | 7    |   |    |    |
| SFAJ5000220ZC  | 22pF -20% / +80%       |            |                     |           | -                                   | -      | -    | -     | -      | 10   |   |    |    |
| SFAJ5000330ZC  | 33pF -20% / +80%       |            |                     |           | -                                   | -      | -    | -     | -      | 12   |   |    |    |
| *SFAJ5000470ZC | 47pF -20% / +80%       |            |                     |           | -                                   | -      | -    | -     | 1      | 15   |   |    |    |
| *SFAJ5000680MC | 68pF                   |            |                     |           | -                                   | -      | -    | -     | 2      | 18   |   |    |    |
| *SFAJ5000101MC | 100pF                  |            |                     |           | -                                   | -      | -    | -     | 4      | 22   |   |    |    |
| SFAJ5000151MC  | 150pF                  |            |                     |           | -                                   | -      | -    | -     | 7      | 25   |   |    |    |
| *SFAJ5000221MC | 220pF                  |            |                     |           | -                                   | -      | -    | -     | 10     | 29   |   |    |    |
| *SFAJ5000331MC | 330pF                  |            |                     |           | -                                   | -      | -    | -     | 13     | 33   |   |    |    |
| *SFAJ5000471MX | 470pF                  |            |                     |           | †X7R                                | 500#   | 750  | -     | -      | -    | 1 | 16 | 35 |
| SFAJ5000681MX  | 680pF                  |            |                     |           |                                     |        |      | -     | -      | -    | 2 | 19 | 36 |
| *SFAJ5000102MX | 1.0nF                  | X7R        | 200                 | 500       | -                                   | -      | -    | 4     | 23     | 41   |   |    |    |
| SFAJ5000152MX  | 1.5nF                  |            |                     |           | -                                   | -      | -    | 7     | 26     | 45   |   |    |    |
| *SFAJ5000222MX | 2.2nF                  |            |                     |           | -                                   | -      | -    | 10    | 30     | 50   |   |    |    |
| SFAJ5000332MX  | 3.3nF                  |            |                     |           | -                                   | -      | -    | 13    | 33     | 52   |   |    |    |
| *SFAJ5000472MX | 4.7nF                  |            |                     |           | -                                   | -      | 1    | 16    | 36     | 55   |   |    |    |
| *SFAJ5000682MX | 6.8nF                  |            |                     |           | -                                   | -      | 2    | 19    | 39     | 57   |   |    |    |
| *SFAJ5000103MX | 10nF                   |            |                     |           | -                                   | -      | 4    | 22    | 41     | 60   |   |    |    |
| *SFAJ5000153MX | 15nF                   |            |                     |           | -                                   | -      | 7    | 25    | 44     | 62   |   |    |    |
| *SFAJ5000223MX | 22nF                   |            |                     |           | -                                   | -      | 10   | 29    | 46     | 65   |   |    |    |
| SFAJ5000333MX  | 33nF                   |            |                     |           | -                                   | -      | 13   | 33    | 48     | 68   |   |    |    |
| *SFAJ2000473MX | 47nF                   |            |                     |           | -                                   | 1      | 16   | 35    | 50     | 70   |   |    |    |
| SFAJ2000683MX  | 68nF                   |            |                     |           | -                                   | 2      | 19   | 39    | 54     | >70  |   |    |    |
| *SFAJ1000104MX | 100nF                  | -          | 4                   | 22        | 41                                  | 57     | >70  |       |        |      |   |    |    |
| *SFAJ0500154MX | 150nF                  | -          | 7                   | 25        | 45                                  | 60     | >70  |       |        |      |   |    |    |

# Also rated for operation at 115Vac 400Hz. Self heating will occur - evaluation in situ recommended. \* Recommended values. † Also available in COG/NPO.

Ordering Information - SFAJC range

| SF           | A              | J      | C                        | 050   | 0154  | M                       | X                      | 0                       |
|--------------|----------------|--------|--------------------------|---|---|-------------------------|------------------------|-------------------------|
| Type         | Case style     | Thread | Electrical configuration | Voltage (dc)  | Capacitance in picofarads (pF)  | Tolerance               | Dielectric             | Hardware                |
| Syfer Filter | 4.0mm Hex Head | M3     | C = C Filter             | 050 = 50V<br>100 = 100V<br>200 = 200V<br>500 = 500V | First digit is 0. Second and third digits are significant figures of capacitance code.<br>The fourth digit is number of zeros following<br>Example: 0101 = 100pF<br>0332 = 3300pF | M = ±20%<br>Z = -20+80% | C = COG/NPO<br>X = X7R | 0 = Without<br>1 = With |

Note: The addition of a 4-digit numerical suffix code can be used to denote changes to the standard part. Options include for example: change of finish / alternative voltage rating / non-standard intermediate capacitance values / test requirements. Please refer specific requests to the factory.



**Electrical Details**

|                              |                 |
|------------------------------|-----------------|
| Electrical Configuration     | L-C Filter      |
| Capacitance Measurement      | @ 1000hr Point  |
| Current Rating               | 10A             |
| Insulation Resistance (IR)   | 10GΩ or 1000ΩF  |
| Temperature Rating           | -55°C to +125°C |
| Ferrite Inductance (Typical) | 50nH            |



**Mechanical Details**

|                        |  |
|------------------------|--|
| Head (A/F)             | 4.0mm (0.157")   |
| Nut A/F                | 4.0mm (0.157")   |
| Washer diameter        | 6.9mm (0.272")   |
| Mounting Torque        | 0.25Nm (2.21bf in) max. if using nut<br>0.15Nm (1.32bf in) max. into tapped hole |
| Mounting Hole Diameter | 3.15mm ±0.1 (0.124" ±0.004")   |
| Max. Panel Thickness   | 3.2mm (0.126")   |
| Weight (Typical)       | 0.5g (0.017oz)   |
| Finish                 | Silver plate on copper undercoat   |

| Product Code    | Capacitance (±20%) UOS | Dielectric | Rated Voltage (Vdc) | DWV (Vdc) | Typical No-Load Insertion Loss (dB) |        |      |       |        |      |    |    |     |
|-----------------|------------------------|------------|---------------------|-----------|-------------------------------------|--------|------|-------|--------|------|----|----|-----|
|                 |                        |            |                     |           | 0.01MHz                             | 0.1MHz | 1MHz | 10MHz | 100MHz | 1GHz |    |    |     |
| *SFAJL5000100ZC | 10pF -20% / +80%       | COG/NP0    | 500#                | 750       | -                                   | -      | -    | -     | -      | 6    |    |    |     |
| SFAJL5000150ZC  | 15pF -20% / +80%       |            |                     |           | -                                   | -      | -    | -     | -      | 9    |    |    |     |
| SFAJL5000220ZC  | 22pF -20% / +80%       |            |                     |           | -                                   | -      | -    | -     | -      | 12   |    |    |     |
| SFAJL5000330ZC  | 33pF -20% / +80%       |            |                     |           | -                                   | -      | -    | -     | 1      | 15   |    |    |     |
| *SFAJL5000470ZC | 47pF -20% / +80%       |            |                     |           | -                                   | -      | -    | -     | 2      | 19   |    |    |     |
| *SFAJL5000680MC | 68pF                   |            |                     |           | -                                   | -      | -    | -     | 4      | 20   |    |    |     |
| *SFAJL5000101MC | 100pF                  |            |                     |           | -                                   | -      | -    | -     | 7      | 24   |    |    |     |
| SFAJL5000151MC  | 150pF                  |            |                     |           | -                                   | -      | -    | -     | 10     | 27   |    |    |     |
| *SFAJL5000221MC | 220pF                  |            |                     |           | -                                   | -      | -    | -     | 12     | 30   |    |    |     |
| *SFAJL5000331MC | 330pF                  |            |                     |           | -                                   | -      | -    | 1     | 16     | 34   |    |    |     |
| *SFAJL5000471MX | 470pF                  |            |                     |           | †X7R                                | 500#   | 750  | -     | -      | -    | 2  | 19 | 38  |
| SFAJL5000681MX  | 680pF                  |            |                     |           |                                     |        |      | -     | -      | -    | 3  | 22 | 41  |
| *SFAJL5000102MX | 1.0nF                  | X7R        | 200                 | 500       | -                                   | -      | -    | 6     | 25     | 44   |    |    |     |
| SFAJL5000152MX  | 1.5nF                  |            |                     |           | -                                   | -      | -    | 9     | 29     | 48   |    |    |     |
| *SFAJL5000222MX | 2.2nF                  |            |                     |           | -                                   | -      | -    | 12    | 31     | 51   |    |    |     |
| SFAJL5000332MX  | 3.3nF                  |            |                     |           | -                                   | -      | -    | 15    | 35     | 54   |    |    |     |
| *SFAJL5000472MX | 4.7nF                  |            |                     |           | -                                   | -      | 1    | 18    | 39     | 57   |    |    |     |
| SFAJL5000682MX  | 6.8nF                  |            |                     |           | -                                   | -      | 2    | 21    | 41     | 60   |    |    |     |
| *SFAJL5000103MX | 10nF                   |            |                     |           | -                                   | -      | 4    | 23    | 43     | 63   |    |    |     |
| *SFAJL5000153MX | 15nF                   |            |                     |           | -                                   | -      | 7    | 27    | 46     | 66   |    |    |     |
| *SFAJL5000223MX | 22nF                   |            |                     |           | -                                   | -      | 10   | 30    | 48     | 68   |    |    |     |
| SFAJL5000333MX  | 33nF                   |            |                     |           | -                                   | -      | 13   | 34    | 50     | 70   |    |    |     |
| *SFAJL2000473MX | 47nF                   |            |                     |           | -                                   | 200    | 500  | -     | 1      | 17   | 37 | 51 | >70 |
| SFAJL2000683MX  | 68nF                   |            |                     |           | -                                   | 100    | 250  | -     | 2      | 20   | 40 | 55 | >70 |
| *SFAJL1000104MX | 100nF                  | -          | 50                  | 125       | -                                   | 4      | 22   | 44    | 60     | >70  |    |    |     |
| *SFAJL0500154MX | 150nF                  | -          | -                   | -         | -                                   | 7      | 25   | 47    | 62     | >70  |    |    |     |

# Also rated for operation at 115Vac 400Hz. Self heating will occur - evaluation in situ recommended. \* Recommended values. † Also available in COG/NP0.

**Ordering Information - SFAJL range**

| SF           | A              | J      | L                        | 200   | 0683  | M                                     | X                                    | 1                                     |
|--------------|----------------|--------|--------------------------|---|---|---------------------------------------|--------------------------------------|---------------------------------------|
| Type         | Case style     | Thread | Electrical configuration | Voltage (dc)  | Capacitance in picofarads (pF)  | Tolerance                             | Dielectric                           | Hardware                              |
| Syfer Filter | 4.0mm Hex Head | M3     | L = L-C Filter           | <b>050</b> = 50V<br><b>100</b> = 100V<br><b>200</b> = 200V<br><b>500</b> = 500V | First digit is 0. Second and third digits are significant figures of capacitance code.<br>The fourth digit is number of zeros following<br>Example: <b>0101</b> = 100pF<br><b>0332</b> = 3300pF | <b>M</b> = ±20%<br><b>Z</b> = -20+80% | <b>C</b> = COG/NP0<br><b>X</b> = X7R | <b>0</b> = Without<br><b>1</b> = With |

Note: The addition of a 4-digit numerical suffix code can be used to denote changes to the standard part. Options include for example: change of finish / alternative voltage rating / non-standard intermediate capacitance values / test requirements. Please refer specific requests to the factory.

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