



**THE DATASHEET OF  
SRR6603-151ML**





### Features

- Available in E12 series
- Unit height of 3 mm
- Current up to 3 A
- RoHS compliant\*

### Applications

- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs
  - Radios

## SRR6603 Series - Shielded Power Inductors

### Electrical Specifications

| Bourns Part No. | Inductance 100 KHz |        | Q Ref. | Test Frequency (KHz) Q | SRF Nom. (MHz) | RDC Max. (Ω) | I rms (A) | I sat (A) |
|-----------------|--------------------|--------|--------|------------------------|----------------|--------------|-----------|-----------|
|                 | uH                 | Tol. % |        |                        |                |              |           |           |
| SRR6603-1R0ML   | 1.0                | ±20    | 30     | 200                    | 250            | 0.040        | 3.00      | 1.4       |
| SRR6603-1R5ML   | 1.5                | ±20    | 30     | 200                    | 125            | 0.045        | 2.80      | 0.93      |
| SRR6603-2R2ML   | 2.2                | ±20    | 40     | 200                    | 120            | 0.050        | 1.80      | 0.92      |
| SRR6603-3R3ML   | 3.3                | ±20    | 40     | 200                    | 120            | 0.055        | 1.60      | 0.75      |
| SRR6603-4R7ML   | 4.7                | ±20    | 40     | 200                    | 105            | 0.060        | 1.40      | 0.58      |
| SRR6603-6R8ML   | 6.8                | ±20    | 40     | 200                    | 50             | 0.065        | 1.20      | 0.58      |
| SRR6603-100ML   | 10.0               | ±20    | 40     | 200                    | 38             | 0.075        | 1.00      | 0.37      |
| SRR6603-150ML   | 15.0               | ±20    | 40     | 100                    | 33             | 0.090        | 0.80      | 0.31      |
| SRR6603-220ML   | 22.0               | ±20    | 40     | 100                    | 25             | 0.110        | 0.70      | 0.30      |
| SRR6603-330ML   | 33.0               | ±20    | 40     | 100                    | 20             | 0.190        | 0.60      | 0.24      |
| SRR6603-470ML   | 47.0               | ±20    | 40     | 100                    | 20             | 0.230        | 0.50      | 0.24      |
| SRR6603-680ML   | 68.0               | ±20    | 40     | 100                    | 15             | 0.290        | 0.40      | 0.17      |
| SRR6603-101ML   | 100.0              | ±20    | 40     | 100                    | 10             | 0.480        | 0.30      | 0.13      |
| SRR6603-151ML   | 150.0              | ±20    | 40     | 100                    | 9              | 0.590        | 0.26      | 0.10      |
| SRR6603-221ML   | 220.0              | ±20    | 40     | 100                    | 6              | 0.770        | 0.22      | 0.10      |
| SRR6603-331ML   | 330.0              | ±20    | 40     | 100                    | 5              | 1.400        | 0.20      | 0.07      |
| SRR6603-471ML   | 470.0              | ±20    | 40     | 100                    | 4              | 1.800        | 0.19      | 0.06      |
| SRR6603-681ML   | 680.0              | ±20    | 40     | 100                    | 3              | 2.200        | 0.18      | 0.055     |
| SRR6603-102ML   | 1000.0             | ±20    | 40     | 100                    | 2              | 3.400        | 0.15      | 0.045     |
| SRR6603-152ML   | 1500.0             | ±20    | 50     | 100                    | 2              | 4.200        | 0.12      | 0.035     |
| SRR6603-222ML   | 2200.0             | ±20    | 50     | 100                    | 2              | 8.500        | 0.10      | 0.028     |
| SRR6603-332ML   | 3300.0             | ±20    | 50     | 100                    | 1              | 11.00        | 00.08     | 0.024     |
| SRR6603-472ML   | 4700.0             | ±20    | 50     | 100                    | 1              | 13.90        | 00.06     | 0.021     |
| SRR6603-682ML   | 6800.0             | ±20    | 50     | 100                    | 1              | 25.00        | 00.04     | 0.019     |
| SRR6603-103ML   | 10000.0            | ±20    | 50     | 100                    | 0.8            | 32.80        | 00.02     | 0.017     |

### General Specifications

Test Voltage ..... 0.1 V  
 Reflow Soldering .. 250 °C, 10 sec. max.  
 (In compliance with JEDEC, J-STD-020C, Table 4-2)  
 Operating Temperature  
 ..... -55 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature  
 ..... -55 °C to +125 °C  
 Resistance to Soldering Heat  
 ..... 250 °C, 10 sec. max.  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM) ..... N/A

### Materials

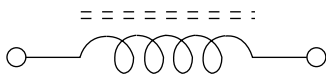
Core ..... Ferrite DR & RI  
 Wire ..... Enameled copper  
 Base ..... Ceramic  
 Terminal ..... Ag/Ni/Au  
 Rated Current  
 ..... Ind. drop of 30 % typ. at Isat  
 Temperature Rise  
 ..... 30 °C max. at rated Irms  
 Packaging ..... 600 pcs. per reel

### Product Dimensions

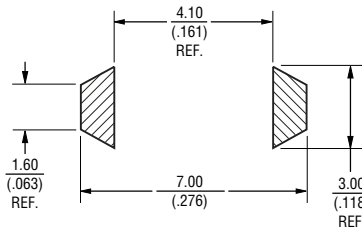


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

### Schematic



### Recommended Layout



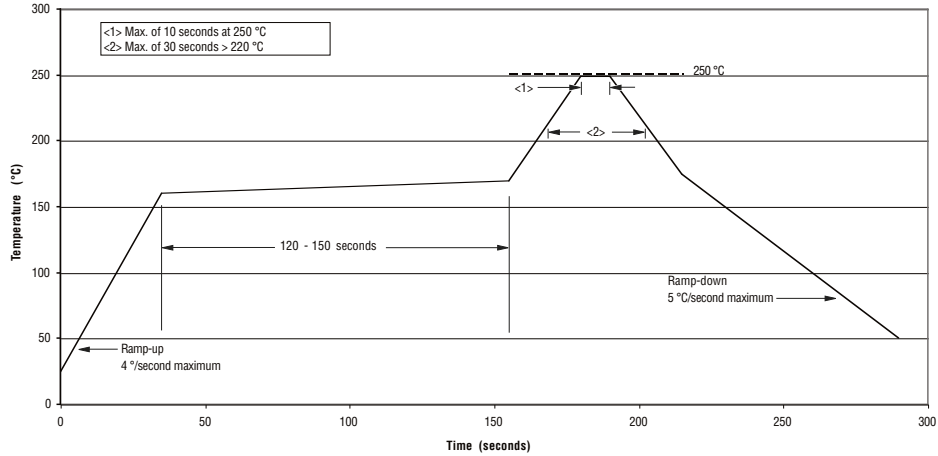
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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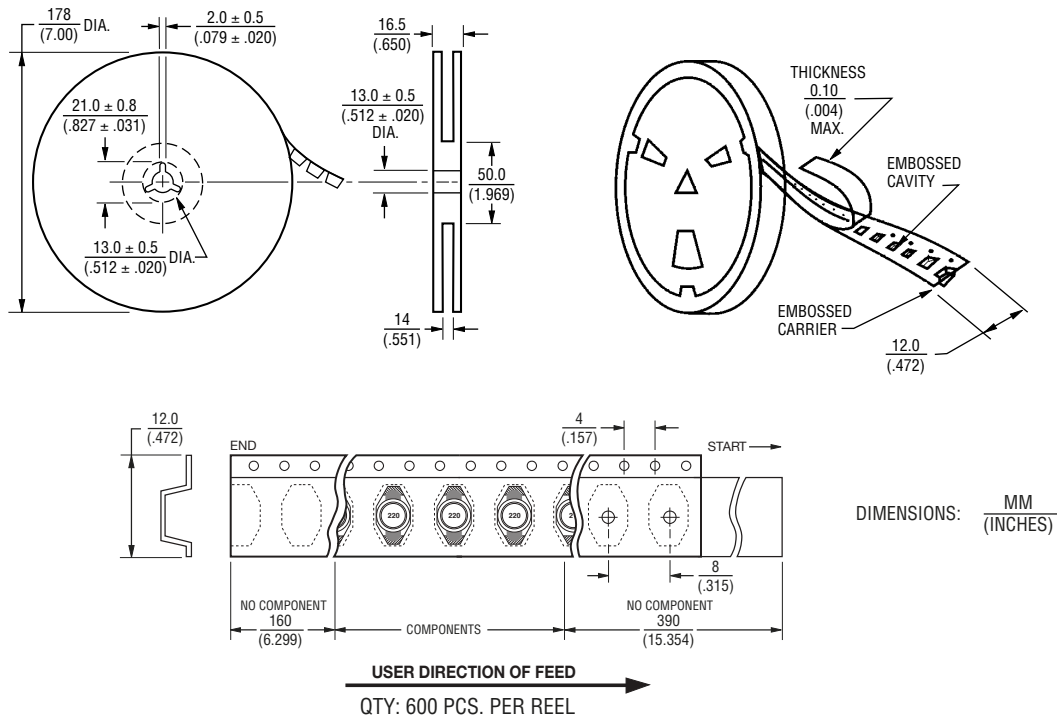
# SRR6603 Series - Shielded Power Inductors

**BOURNS®**

## Soldering Profile



## Packaging Specifications



REV. 11/18

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Users should verify actual device performance in their specific applications.

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