



## Features

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

## Applications

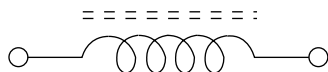
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs
  - Car radios

# SRR6603 Series - Shielded Power Inductors

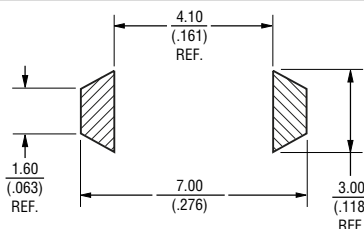
## Electrical Specifications

| Bourns Part No. | Inductance 100 KHz |        | Q<br>Ref. | Test<br>Frequency<br>(KHz) Q | SRF<br>Nom.<br>(MHz) | RDC<br>Max.<br>(Ω) | I rms<br>(A) | I sat<br>(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        |

## Schematic



## Recommended Layout



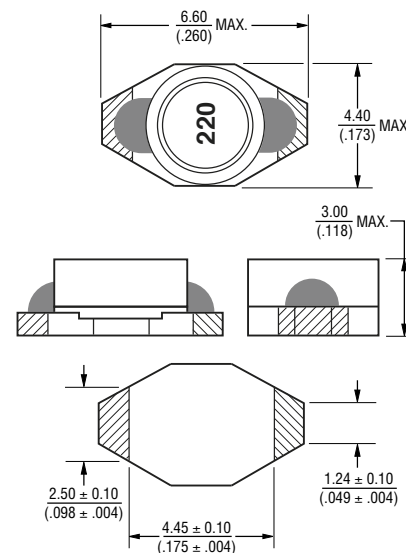
## General Specifications

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



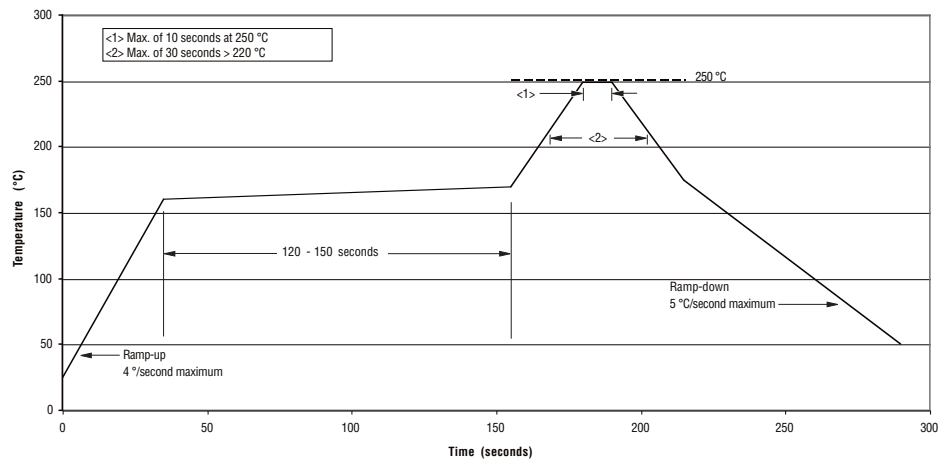
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

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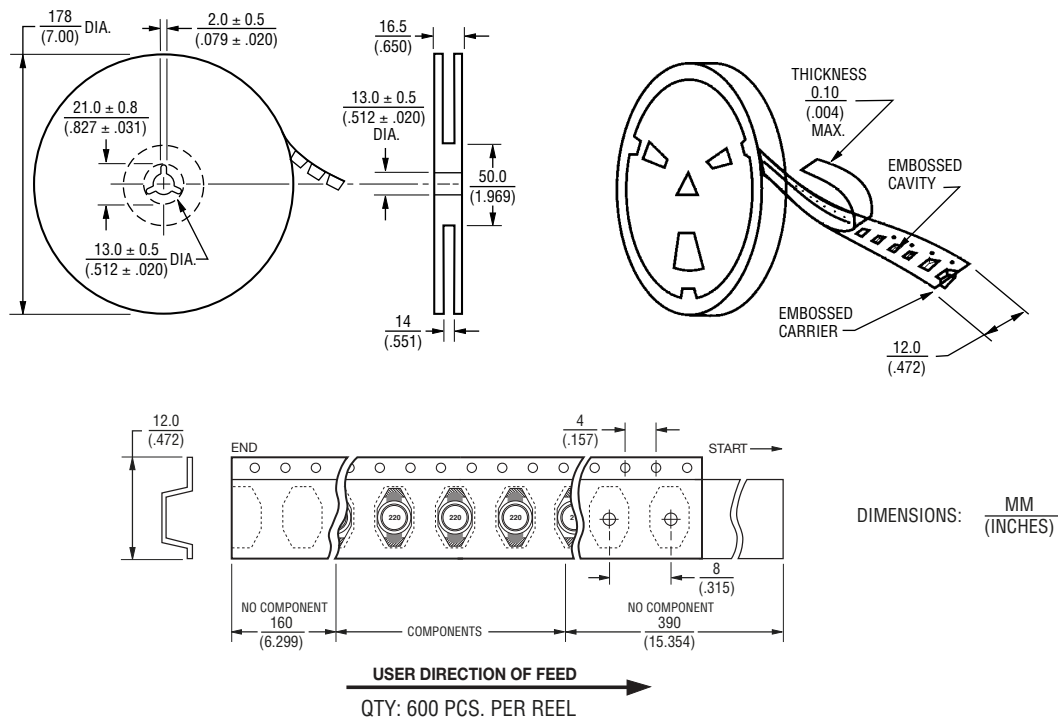
# SRR6603 Series - Shielded Power Inductors

**BOURNS®**

## Soldering Profile



## Packaging Specifications



REV. 03/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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