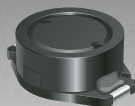




**THE DATASHEET OF
SRR6603-6R8M**



LEAD FREE
VERSIONS ARE
ROHS COMPLIANT



BOURNS®

Features

- Available in E12 series
- Unit height of 3 mm
- Current up to 3 A
- Lead free version available (see How to Order)
- Lead free versions are 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 100kHz | | Q Ref. | Test Frequency (kHz) Q | SRF Nom. (MHz) | RDC Max. (Ω) | IDC Max. (A) |
|-----------------|-------------------|--------|--------|------------------------|----------------|--------------|--------------|
| | (μH) | Tol. % | | | | | |
| SRR6603-1R0M_ | 1.0 | ± 20 | 30 | 200 | 250 | 0.040 | 3.00 |
| SRR6603-1R5M_ | 1.5 | ± 20 | 30 | 200 | 125 | 0.045 | 2.80 |
| SRR6603-2R2M_ | 2.2 | ± 20 | 40 | 200 | 120 | 0.050 | 1.80 |
| SRR6603-3R3M_ | 3.3 | ± 20 | 40 | 200 | 120 | 0.055 | 1.60 |
| SRR6603-4R7M_ | 4.7 | ± 20 | 40 | 200 | 105 | 0.060 | 1.40 |
| SRR6603-6R8M_ | 6.8 | ± 20 | 40 | 200 | 50 | 0.065 | 1.20 |
| SRR6603-100M_ | 10.0 | ± 20 | 40 | 200 | 38 | 0.075 | 1.00 |
| SRR6603-150M_ | 15.0 | ± 20 | 40 | 100 | 33 | 0.090 | 0.80 |
| SRR6603-220M_ | 22.0 | ± 20 | 40 | 100 | 25 | 0.110 | 0.70 |
| SRR6603-330M_ | 33.0 | ± 20 | 40 | 100 | 20 | 0.190 | 0.60 |
| SRR6603-470M_ | 47.0 | ± 20 | 40 | 100 | 20 | 0.230 | 0.50 |
| SRR6603-680M_ | 68.0 | ± 20 | 40 | 100 | 15 | 0.290 | 0.40 |
| SRR6603-101M_ | 100.0 | ± 20 | 40 | 100 | 10 | 0.480 | 0.30 |
| SRR6603-151M_ | 150.0 | ± 20 | 40 | 100 | 9 | 0.590 | 0.26 |
| SRR6603-221M_ | 220.0 | ± 20 | 40 | 100 | 6 | 0.770 | 0.22 |
| SRR6603-331M_ | 330.0 | ± 20 | 40 | 100 | 5 | 1.400 | 0.20 |
| SRR6603-471M_ | 470.0 | ± 20 | 40 | 100 | 4 | 1.800 | 0.19 |
| SRR6603-681M_ | 680.0 | ± 20 | 40 | 100 | 3 | 2.200 | 0.18 |
| SRR6603-102M_ | 1000.0 | ± 20 | 40 | 100 | 2 | 3.400 | 0.15 |
| SRR6603-152M_ | 1500.0 | ± 20 | 50 | 100 | 2 | 4.200 | 0.12 |
| SRR6603-222M_ | 2200.0 | ± 20 | 50 | 100 | 2 | 8.500 | 0.10 |
| SRR6603-332M_ | 3300.0 | ± 20 | 50 | 100 | 1 | 11.000 | 0.08 |
| SRR6603-472M_ | 4700.0 | ± 20 | 50 | 100 | 1 | 13.900 | 0.06 |
| SRR6603-682M_ | 6800.0 | ± 20 | 50 | 100 | 1 | 25.000 | 0.04 |
| SRR6603-103M_ | 10000.0 | ± 20 | 50 | 100 | 0.8 | 32.800 | 0.02 |

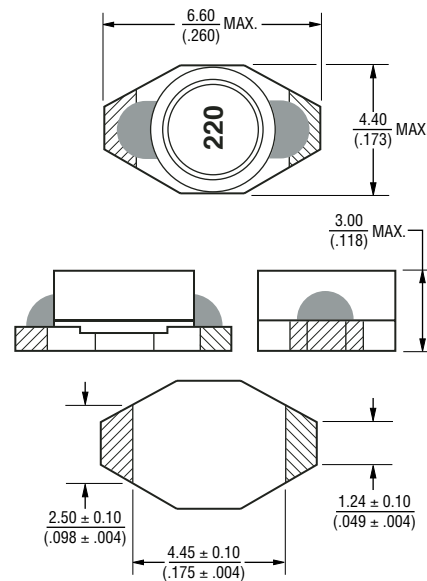
General Specifications

Test Voltage.....0.1 V
 Reflow Soldering ...230 °C, 10 sec. max.
 Operating Temperature ..-40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature..-40 °C to +105 °C
 Resistance to Soldering Heat
260 °C for 10 sec.

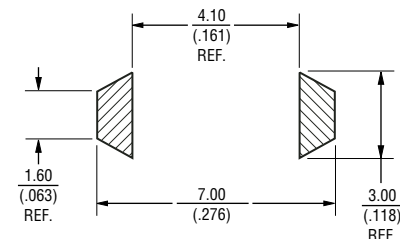
Materials

Core.....Ferrite DR & RI core
 Wire.....Enameled copper
 BaseCeramic
 Temperature Rise
30 °C max. at rated I_{rms}
 Packaging.....600 pcs. per reel

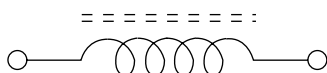
Product Dimensions



Recommended Layout



Electrical Schematic



How to Order

SRR6603 - 100M

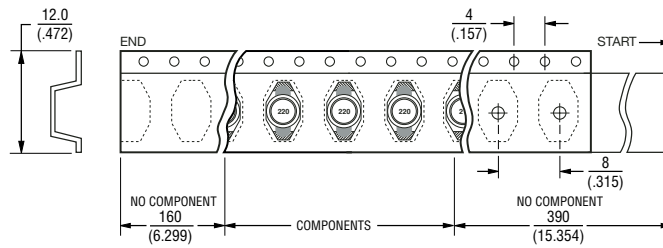
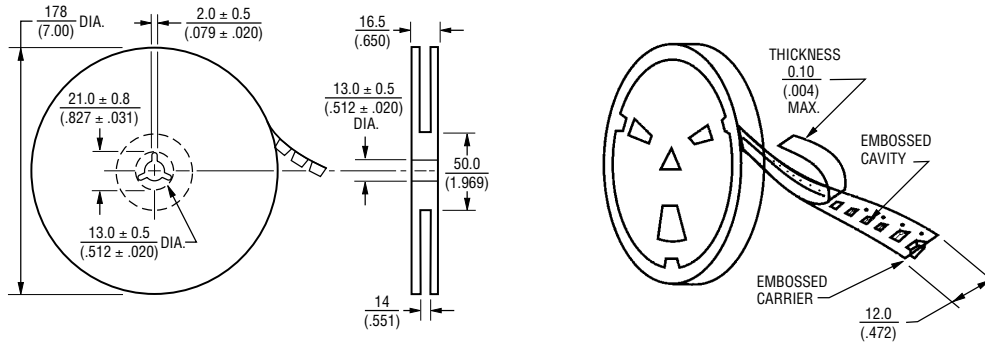
Model _____
 Value/Tolerance: from table _____
 Termination _____
 L = Cu/Ni/Au
 Blank = Cu/Ni/SnPb

*RoHS Directive 2002/95/EC Jan 27 2003 including Annex
 Specifications are subject to change without notice.
 Customers should verify actual device performance in their specific applications.

SRR6603 Series - Shielded Power Inductors

BOURNS®

Packaging Specifications



USER DIRECTION OF FEED →

QTY: 600 PCS. PER REEL

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

REV. 11/04

Specifications are subject to change without notice.

Customers should verify actual device performance in their specific applications.

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ [View SRR6603-6R8M on WIN SOURCE](#)
- ⊖ [Bourns Inc. Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management