



**THE DATASHEET OF
SRR0604-101KL**





Features

- Available in E6 series
- Low unit height of 4.8 mm
- High current
- RoHS compliant*

Applications

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

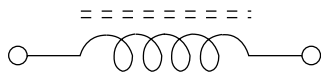
SRR0604 Series - Shielded Power Inductors

Electrical Specifications

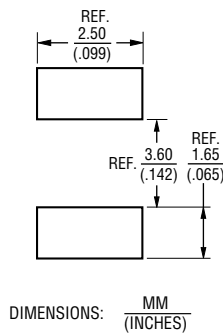
| Bourns Part No. | Inductance 1 KHz | | Q Ref. | Test Frequency (MHz) | SRF Min. (MHz) | RDC Max. (Ω) | I rms Max. (A) | I sat Typ. (A) | **K- Factor |
|-----------------|---------------------|--------|-----------|----------------------------|----------------------|--------------------|----------------------|----------------------|----------------|
| | μH | Tol. % | | | | | | | |
| SRR0604-1R5ML | 1.5 | ±20 | 23 | 7.96 | 110.0 | 0.028 | 2.80 | 3.95 | 351 |
| SRR0604-2R2ML | 2.2 | ±20 | 21 | 7.96 | 100.0 | 0.032 | 2.50 | 3.50 | 310 |
| SRR0604-2R5ML | 2.5 | ±20 | 21 | 7.96 | 100.0 | 0.035 | 2.50 | 3.50 | 277 |
| SRR0604-3R3ML | 3.3 | ±20 | 21 | 7.96 | 90.0 | 0.050 | 2.30 | 2.90 | 251 |
| SRR0604-4R7ML | 4.7 | ±20 | 10 | 7.96 | 50.0 | 0.060 | 2.00 | 2.55 | 210 |
| SRR0604-6R8ML | 6.8 | ±20 | 20 | 7.96 | 37.0 | 0.070 | 1.60 | 2.05 | 170 |
| SRR0604-100ML | 10 | ±20 | 18 | 2.52 | 30.0 | 0.12 | 1.30 | 1.80 | 142 |
| SRR0604-150ML | 15 | ±20 | 18 | 2.52 | 30.0 | 0.13 | 1.10 | 1.45 | 117 |
| SRR0604-220ML | 22 | ±20 | 16 | 2.52 | 25.0 | 0.19 | 0.90 | 1.20 | 96 |
| SRR0604-330KL | 33 | ±10 | 16 | 2.52 | 21.0 | 0.25 | 0.70 | 0.95 | 79 |
| SRR0604-470KL | 47 | ±10 | 15 | 2.52 | 18.0 | 0.36 | 0.60 | 0.80 | 65 |
| SRR0604-680KL | 68 | ±10 | 15 | 2.52 | 15.0 | 0.52 | 0.50 | 0.68 | 54 |
| SRR0604-101KL | 100 | ±10 | 23 | 0.796 | 13.0 | 0.65 | 0.40 | 0.57 | 45 |
| SRR0604-151KL | 150 | ±10 | 21 | 0.796 | 12.0 | 1.00 | 0.30 | 0.47 | 37 |
| SRR0604-221KL | 220 | ±10 | 20 | 0.796 | 10.0 | 1.70 | 0.25 | 0.32 | 30 |
| SRR0604-331KL | 330 | ±10 | 18 | 0.796 | 7.0 | 2.10 | 0.20 | 0.28 | 25 |
| SRR0604-471KL | 470 | ±10 | 18 | 0.796 | 6.5 | 3.30 | 0.18 | 0.22 | 21 |
| SRR0604-681KL | 680 | ±10 | 16 | 0.796 | 6.0 | 4.80 | 0.15 | 0.19 | 17 |
| SRR0604-102KL | 1000 | ±10 | 15 | 0.252 | 5.5 | 6.10 | 0.12 | 0.15 | 14 |
| SRR0604-222KL | 2200 | ±10 | 80 | 0.252 | 0.65 | 16.0 | 0.10 | 0.08 | 9 |

**K-Factor: To calculate core flux density, Bp-p (gauss) = K x L(μH) x Δ I (peak-to-peak ripple current, A), determine core loss from *Core Loss vs. Flux Density* plot.

Schematic



Recommended Layout



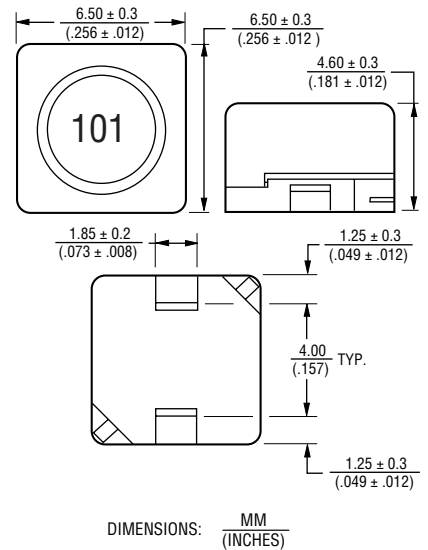
General Specifications

Test Voltage 1 Volt
 Operating Temperature -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature .. -40 °C to +125 °C
 Moisture Sensitivity Level 1
 ESD Classification (HBM)..... N/A

Materials

Core Ferrite DR & RI
 Wire Enameled copper
 Base LCP E4008
 Terminal Cu/Ni/Sn
 Rated Current
 Ind. drop of 10 % typ. at Isat
 Temperature Rise 40 °C max. at rated I rms
 Packaging 1000 pcs. per reel

Product Dimensions



WARNING Cancer and Reproductive Harm - 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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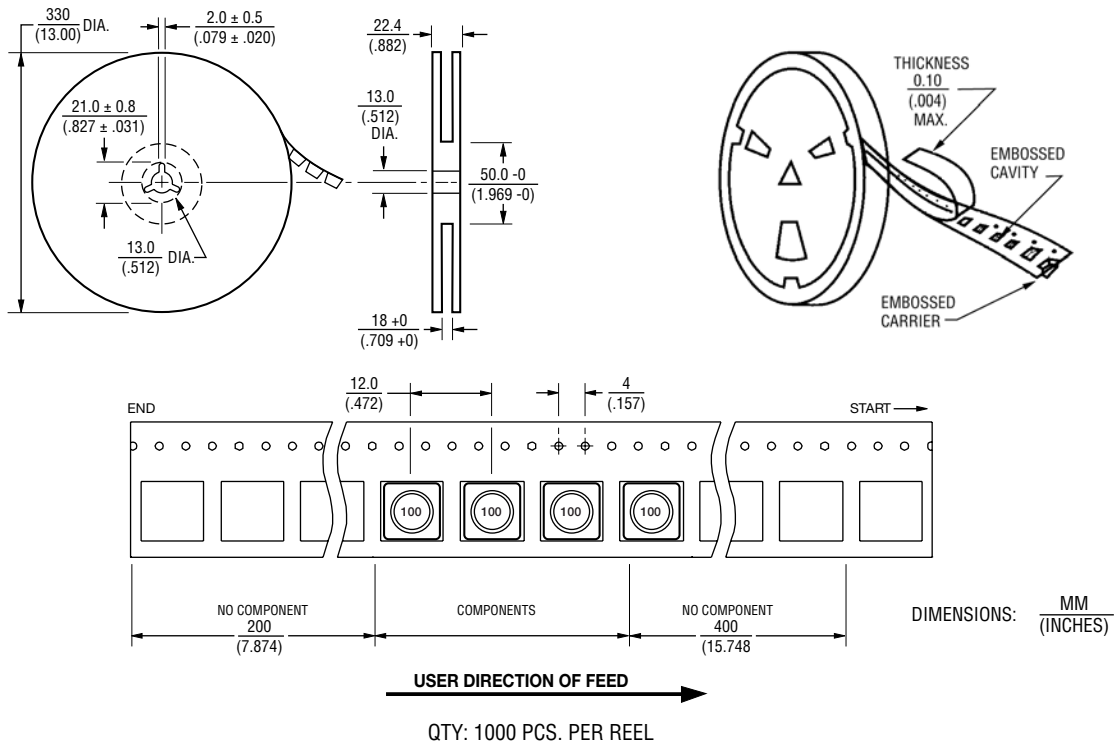
SRR0604 Series - Shielded Power Inductors

BOURNS®

Core Loss vs. Flux Density



Packaging Specifications



REV. 04/19

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