



Features

- Available in E6 series
- Unit height of 1.1 mm
- Current up to 1800 mA
- RoHS compliant*

Applications

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

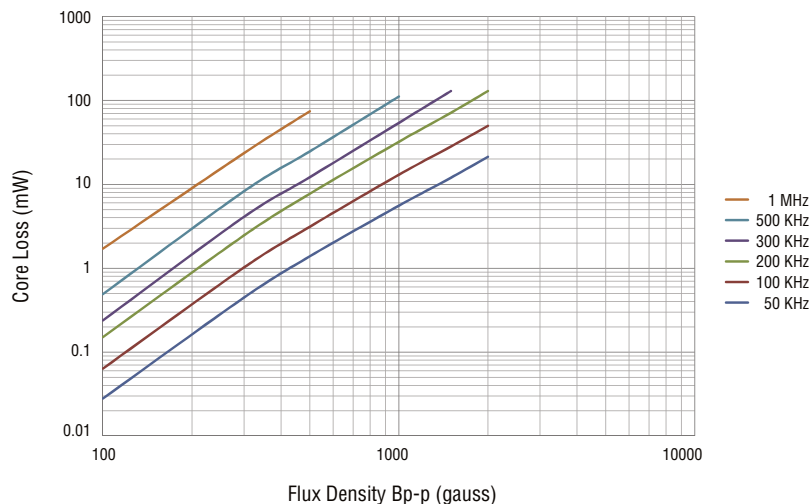
SRU5011 Series - Shielded SMD Power Inductors

Electrical Specifications

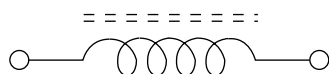
| Bourns Part Number | Inductance @ 100 KHz | | Q Ref. | Test Freq. (MHz) | SRF Min. (MHz) | RDC (mΩ) | I rms Max. (A) | I sat Typ. (A) | **K- Factor |
|-----------------------|-------------------------|-------------|-----------|------------------------|----------------------|-------------|----------------------|----------------------|----------------|
| | L (μH) | Tol. (%) | | | | | | | |
| SRU5011-1R5Y | 1.5 | ±30 | 8 | 7.96 | 195.0 | 32 | 1.80 | 1.50 | 904 |
| SRU5011-2R5Y | 2.5 | ±30 | 8 | 7.96 | 125.0 | 52 | 1.30 | 1.10 | 765 |
| SRU5011-3R3Y | 3.3 | ±30 | 8 | 7.96 | 110.0 | 66 | 1.15 | 0.94 | 585 |
| SRU5011-4R7Y | 4.7 | ±30 | 8 | 7.96 | 85.0 | 95 | 1.00 | 0.82 | 524 |
| SRU5011-6R8Y | 6.8 | ±30 | 8 | 7.96 | 70.0 | 130 | 0.82 | 0.68 | 398 |
| SRU5011-100Y | 10.0 | ±30 | 12 | 7.96 | 50.0 | 170 | 0.70 | 0.58 | 368 |
| SRU5011-150Y | 15.0 | ±30 | 12 | 2.52 | 42.0 | 250 | 0.60 | 0.48 | 284 |
| SRU5011-220Y | 22.0 | ±30 | 14 | 2.52 | 38.0 | 380 | 0.50 | 0.40 | 231 |
| SRU5011-330Y | 33.0 | ±30 | 14 | 2.52 | 30.0 | 550 | 0.38 | 0.30 | 188 |
| SRU5011-470Y | 47.0 | ±30 | 16 | 2.52 | 25.0 | 800 | 0.32 | 0.26 | 163 |
| SRU5011-680Y | 68.0 | ±30 | 14 | 2.52 | 20.0 | 1240 | 0.26 | 0.22 | 136 |
| SRU5011-101Y | 100.0 | ±30 | 30 | 0.796 | 15.0 | 1600 | 0.20 | 0.18 | 112 |

**K-Factor: To calculate core flux density, Bp-p (gauss) = $K \times L(\mu H) \times \Delta I$ (peak-to-peak ripple current, A), determine core loss from *Core Loss vs. Flux Density* plot.

Core Loss vs. Flux Density

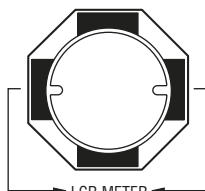


Electrical Schematic



* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
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Inductor Connection



WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

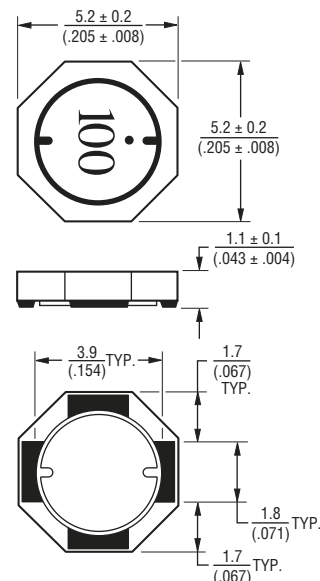
General Specifications

Test Voltage0.1 V
Reflow Soldering .. 230 °C, 50 sec. max.
Operating Temp.-40 °C to +125 °C
(Temperature rise included)
Storage Temperature...-40 °C to +125 °C
Resistance to Soldering Heat
.....+260 °C for 10 sec.
Moisture Sensitivity Level..... 1
ESD Classification (HBM)..... N/A

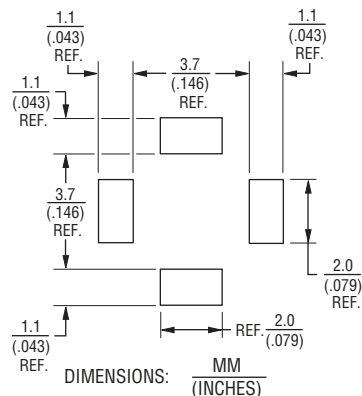
Materials

Core.....Ferrite DR and RI core
Wire.....Enameled copper
Terminal.....Ag/Ni/Sn
Rated Current..Ind. drop 35 % typ. at Isat
Temp. Rise..... 25 °C max. at rated Irms
Packaging..... 1500 pcs. per reel

Product Dimensions



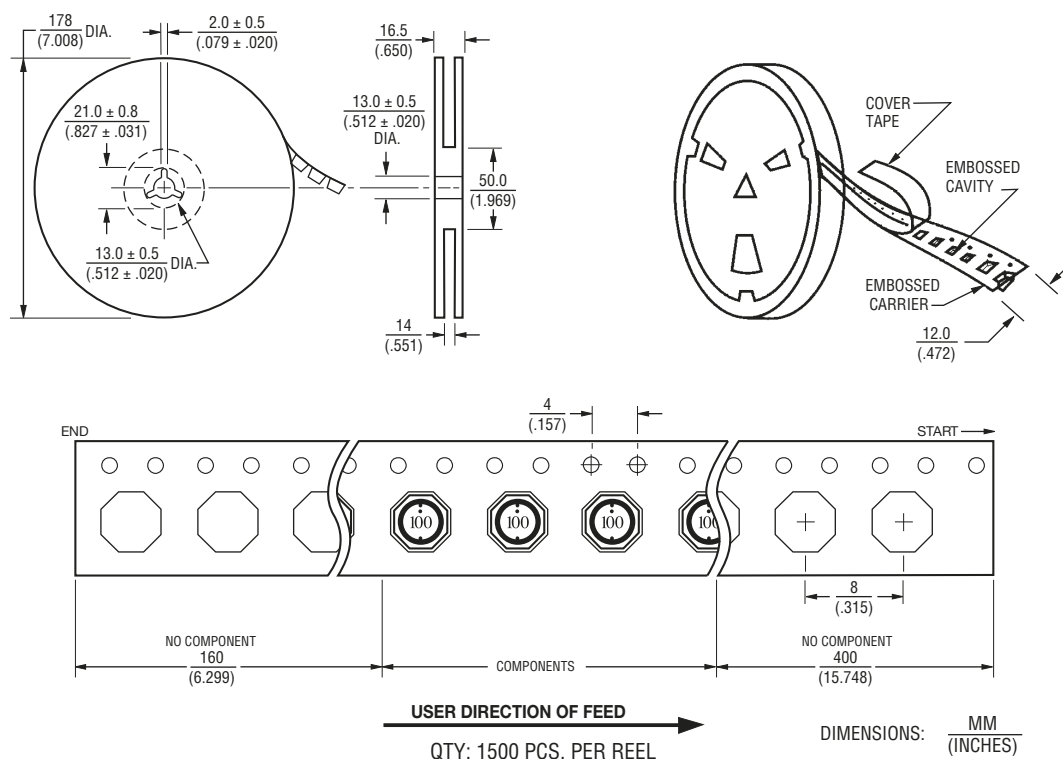
Recommended Layout



SRU5011 Series - Shielded SMD Power Inductors

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Packaging Specifications



REV. 03/18

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