



Features

- Available in E6 series
- Unit height of 2.8 mm
- Current up to 7 A
- RoHS compliant*

Applications

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

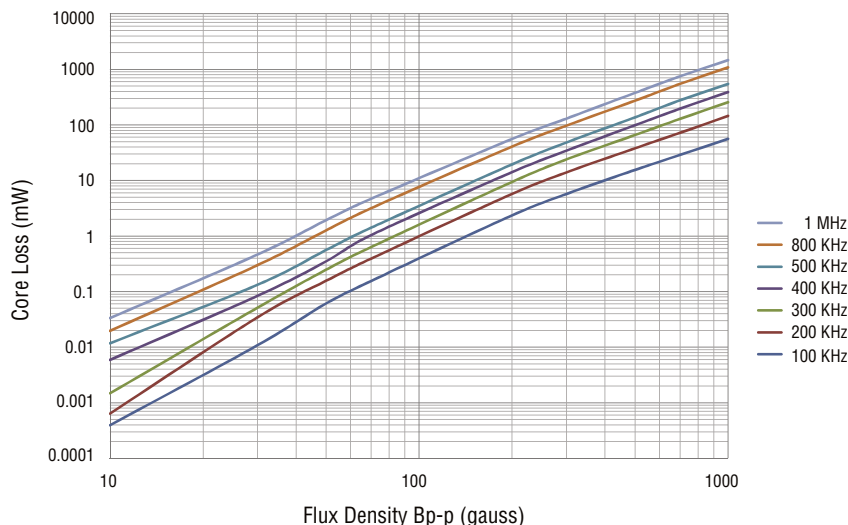
SRU8028 Series - Shielded SMD Power Inductors

Electrical Specifications

| Bourns Part No. | Inductance 100 KHz | | Q Ref. | Test Freq. (MHz) | SRF Typ. (MHz) | RDC (mΩ) | I _{rms} Max. (A) | I _{sat} Typ. (A) | **K-Factor |
|-----------------|--------------------|--------|--------|------------------|----------------|----------|---------------------------|---------------------------|------------|
| | (μH) | Tol. % | | | | | | | |
| SRU8028-1R0Y | 1.0 | ±30 | 12 | 7.96 | 66.0 | 10.1 | 7.00 | 5.50 | 389 |
| SRU8028-2R5Y | 2.5 | ±30 | 15 | 7.96 | 65.0 | 13.6 | 4.50 | 4.20 | 251 |
| SRU8028-3R3Y | 3.3 | ±30 | 12 | 7.96 | 60.0 | 17.5 | 3.60 | 3.50 | 222 |
| SRU8028-4R7Y | 4.7 | ±30 | 15 | 7.96 | 50.0 | 20.0 | 3.70 | 3.20 | 198 |
| SRU8028-6R8Y | 6.8 | ±30 | 13 | 7.96 | 40.0 | 34.0 | 2.80 | 2.50 | 164 |
| SRU8028-8R2Y | 8.2 | ±30 | 17 | 7.96 | 37.0 | 54.0 | 2.60 | 2.30 | 143 |
| SRU8028-100Y | 10.0 | ±30 | 22 | 2.52 | 35.0 | 45.0 | 2.60 | 2.20 | 130 |
| SRU8028-120Y | 12.0 | ±30 | 21 | 2.52 | 30.0 | 76.0 | 2.20 | 2.00 | 121 |
| SRU8028-150Y | 15.0 | ±30 | 20 | 2.52 | 25.0 | 66.0 | 2.00 | 1.70 | 108 |
| SRU8028-220Y | 22.0 | ±30 | 22 | 2.52 | 20.0 | 106 | 1.60 | 1.50 | 88 |
| SRU8028-330Y | 33.0 | ±30 | 20 | 2.52 | 15.0 | 147 | 1.30 | 1.10 | 74 |
| SRU8028-470Y | 47.0 | ±30 | 14 | 2.52 | 12.0 | 177 | 1.20 | 1.00 | 62 |
| SRU8028-680Y | 68.0 | ±30 | 23 | 2.52 | 9.0 | 317 | 0.85 | 0.80 | 50 |
| SRU8028-101Y | 100.0 | ±30 | 35 | 0.796 | 8.0 | 390 | 0.75 | 0.70 | 41 |

**K-Factor: To calculate core flux density, B_{p-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.

Core Loss vs. Flux Density



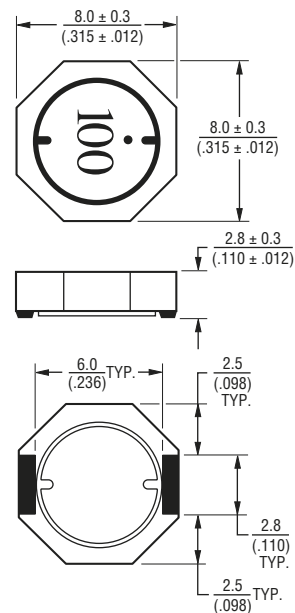
General Specifications

Test Voltage 1 V
 Reflow Soldering .. 230 °C, 50 sec. max.
 Operating Temperature -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature .. -40 °C to +125 °C
 Resistance to Soldering Heat 260 °C for 10 sec.
 Rated Current..Ind. drop 35 % typ. at I_{sat}
 Temperature Rise 40 °C max. at rated I_{rms}
 Moisture Sensitivity Level..... 1
 ESD Classification (HBM)..... N/A

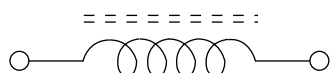
Materials

Core..... Ferrite DR and RI core
 Wire Enamelled copper
 Terminal Ag/Ni/Sn
 Packaging..... 1500 pcs. per reel

Product Dimensions

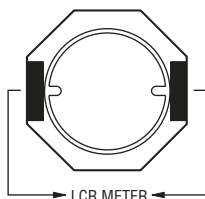


Electrical Schematic



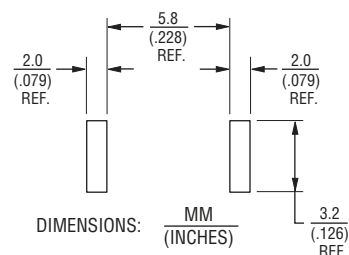
* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
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Inductor Connection



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

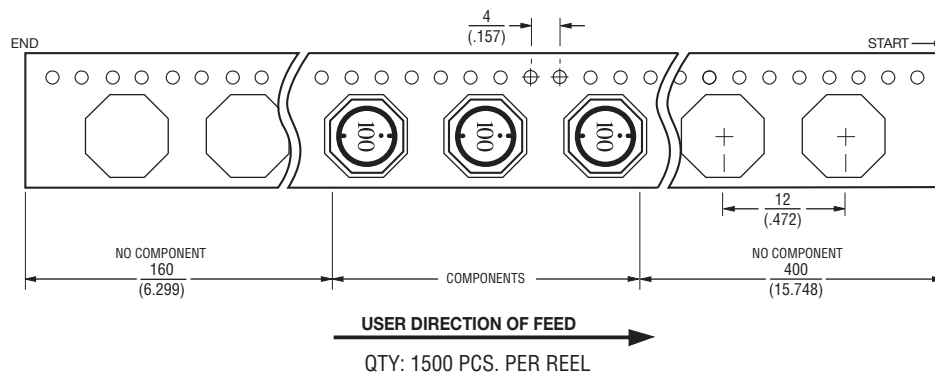
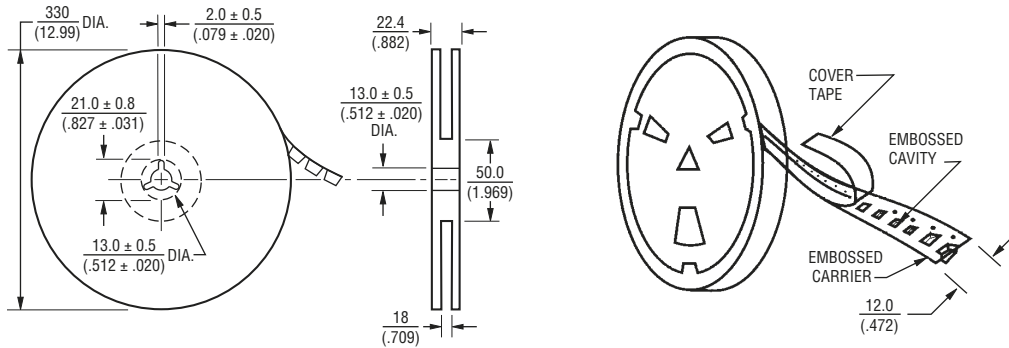
Recommended Layout



SRU8028 Series - Shielded SMD Power Inductors

BOURNS®

Packaging Specifications



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

REV. 03/18

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