



Features

- Available in E6 series
- Unit height of 4.3 mm
- Current up to 5.4 A
- RoHS compliant*

Applications

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

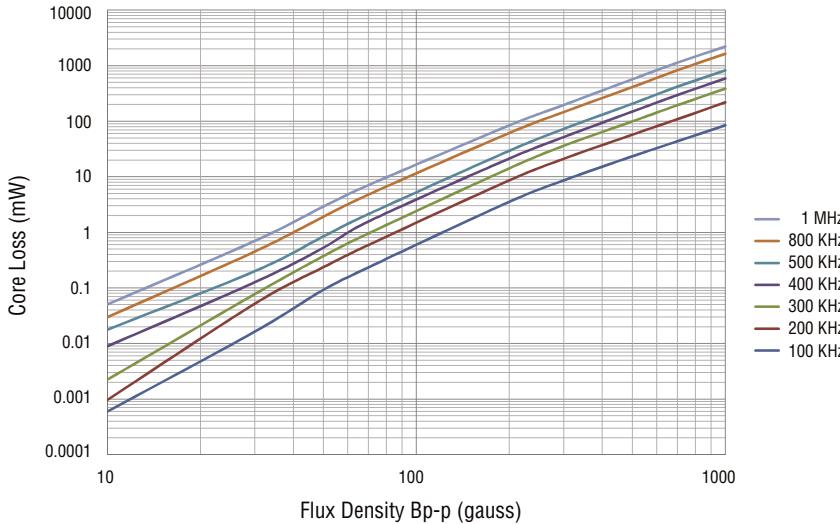
SRU8043 Series - Shielded SMD Power Inductors

Electrical Specifications

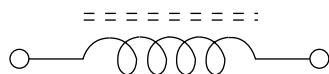
| Bourns Part No. | Inductance 100 KHz | | Q Ref. | Test Freq. (MHz) | SRF Min. (MHz) | RDC (mΩ) | Irms Max. (A) | Isat Typ. (A) | **K-Factor |
|-----------------|--------------------|--------|--------|------------------|----------------|----------|---------------|---------------|------------|
| | (μH) | Tol. % | | | | | | | |
| SRU8043-2R2Y | 2.2 | ± 30 | 15 | 7.96 | 65.0 | 11.2 | 5.40 | 5.20 | 250 |
| SRU8043-3R9Y | 3.9 | ± 30 | 15 | 7.96 | 42.0 | 14.6 | 4.80 | 4.00 | 191 |
| SRU8043-4R7Y | 4.7 | ± 30 | 13 | 7.96 | 36.0 | 17.0 | 4.60 | 3.60 | 171 |
| SRU8043-6R8Y | 6.8 | ± 30 | 12 | 7.96 | 30.0 | 22.4 | 3.80 | 3.10 | 141 |
| SRU8043-100Y | 10 | ± 30 | 27 | 2.52 | 20.0 | 30.0 | 3.50 | 2.70 | 120 |
| SRU8043-120Y | 12 | ± 30 | 15 | 2.52 | 15.0 | 39.0 | 2.80 | 2.20 | 110 |
| SRU8043-150Y | 15 | ± 30 | 26 | 2.52 | 15.0 | 46.0 | 2.70 | 2.00 | 98 |
| SRU8043-180Y | 18 | ± 30 | 15 | 2.52 | 15.0 | 62.0 | 2.30 | 1.70 | 87 |
| SRU8043-220Y | 22 | ± 30 | 24 | 2.52 | 12.0 | 72.5 | 2.20 | 1.70 | 79 |
| SRU8043-270Y | 27 | ± 30 | 17 | 2.52 | 12.0 | 84.0 | 1.80 | 1.55 | 73 |
| SRU8043-330Y | 33 | ± 30 | 21 | 2.52 | 11.0 | 100.0 | 1.70 | 1.40 | 66 |
| SRU8043-470Y | 47 | ± 30 | 21 | 2.52 | 9.0 | 120.0 | 1.50 | 1.20 | 55 |
| SRU8043-680Y | 68 | ± 30 | 20 | 2.52 | 7.0 | 192.0 | 1.20 | 1.00 | 44 |
| SRU8043-101Y | 100 | ± 30 | 50 | 0.796 | 6.0 | 287.0 | 1.00 | 0.80 | 38 |

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

Core Loss vs. Flux Density

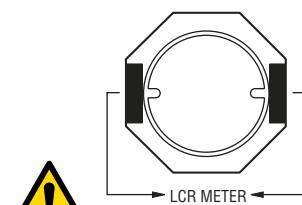


Electrical Schematic



* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

Inductor Connection



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

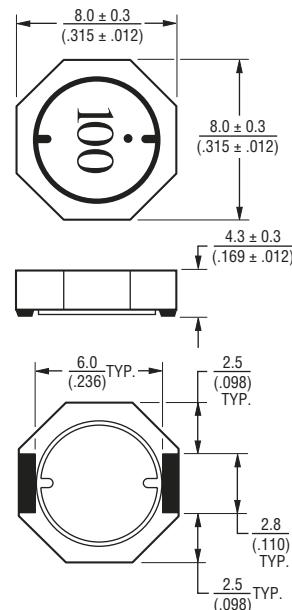
General Specifications

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.
 Moisture Sensitivity Level 1
 ESD Classification (HBM)..... N/A

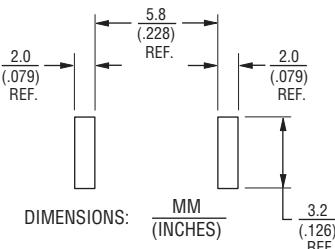
Materials

Core..... Ferrite DR and RI core
 Wire..... Enameled copper
 Terminal..... Ag/Ni/Sn
 Rated Current Ind. drop 35 % typ. at Isat
 Temperature Rise 40 °C max. at rated Irms
 Packaging..... 1000 pcs. per reel

Product Dimensions



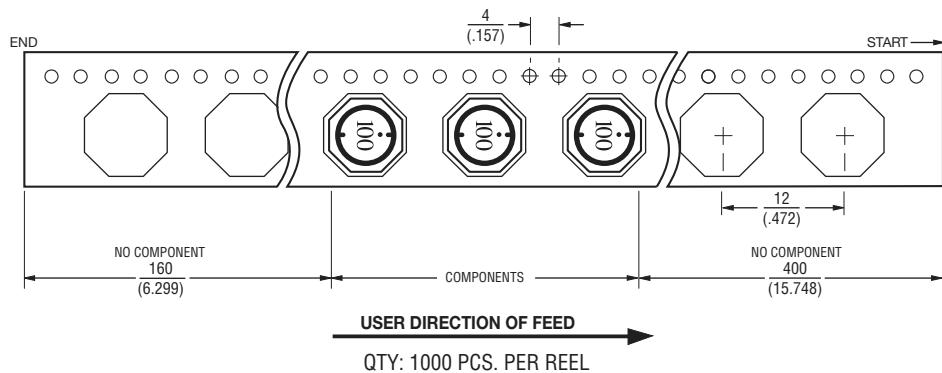
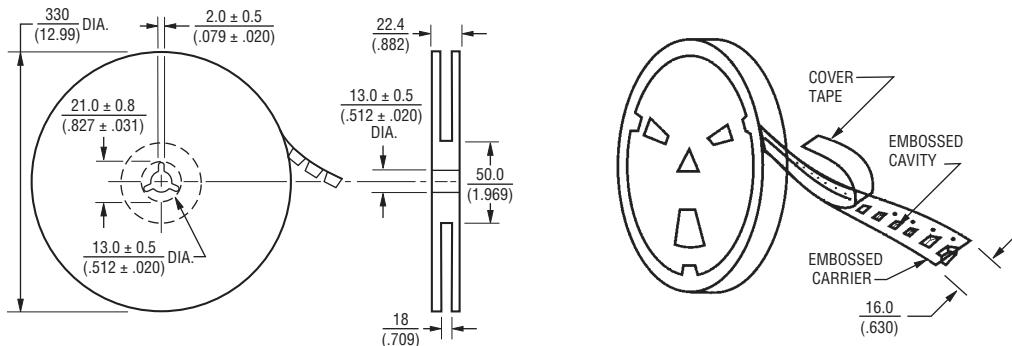
Recommended Layout



SRU8043 Series - Shielded SMD Power Inductors

BOURNS®

Packaging Specifications



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

REV. 03/18

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