



Features

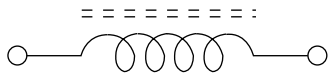
- Shielded construction
- Inductance range: 3.5 to 100 μ H
- Rated current up to 5 A
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

SRU8045A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

| Bourns Part Number | Inductance @ 100 kHz / 0.1 V | | Q (Ref.) | Test Freq. (MHz) | SRF (MHz) Typ. | DCR (Ω) | | I rms (A) | I sat (A) |
|--------------------|------------------------------|----------|----------|------------------|----------------|------------------|--------|-----------|-----------|
| | L (μ H) | Tol. (%) | | | | Typ. | Max. | | |
| SRU8045A-3R5Y | 3.5 | ± 30 | 12 | 7.96 | 45 | 0.0188 | 0.025 | 5.00 | 5.00 |
| SRU8045A-4R7Y | 4.7 | ± 30 | 10 | 7.96 | 30 | 0.022 | 0.0275 | 4.60 | 4.40 |
| SRU8045A-6R2Y | 6.2 | ± 30 | 10 | 7.96 | 23 | 0.0285 | 0.036 | 4.20 | 3.80 |
| SRU8045A-100Y | 10 | ± 30 | 16 | 2.52 | 18 | 0.035 | 0.048 | 3.50 | 3.30 |
| SRU8045A-220Y | 22 | ± 30 | 18 | 2.52 | 12 | 0.094 | 0.122 | 2.25 | 2.15 |
| SRU8045A-330Y | 33 | ± 30 | 14 | 2.52 | 8 | 0.118 | 0.15 | 2.00 | 1.80 |
| SRU8045A-470Y | 47 | ± 30 | 12 | 2.52 | 6 | 0.215 | 0.27 | 1.45 | 1.40 |
| SRU8045A-680Y | 68 | ± 30 | 8 | 2.52 | 4 | 0.32 | 0.40 | 1.25 | 1.20 |
| SRU8045A-101Y | 100 | ± 30 | 20 | 0.796 | 3 | 0.40 | 0.50 | 1.00 | 0.92 |

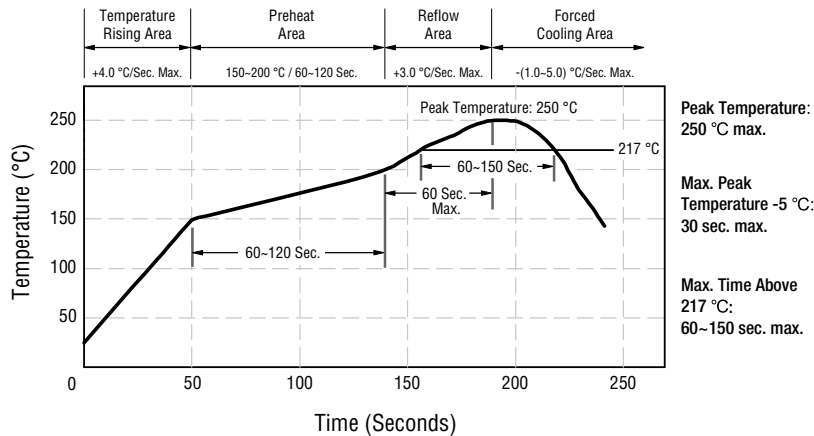
Electrical Schematic



How to Order

Model _____ **SRU8045A - 100Y**
 Value Code (see table) _____

Soldering Profile



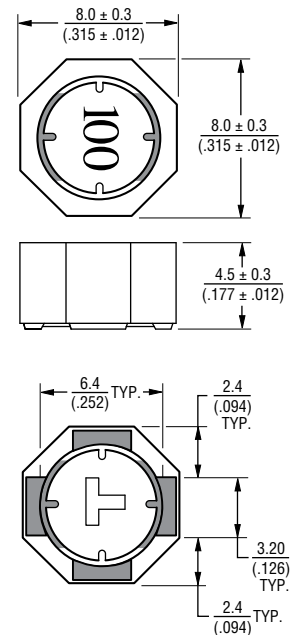
General Specifications

Operating Temp. -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature ... -40 °C to +125 °C
 Temperature Rise 40 °C at rated Irms
 Rated Current
 Inductance drops 35 % at Isat
 Failure In Time (FIT) 24.7/10⁹ hours
 Mean Time Between Failures (MTBF)
 40.4 x 10⁶ hours

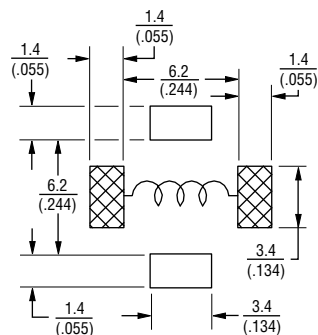
Materials

Core Ferrite
 Wire Enamelled copper
 Terminal Finish Sn
 Packaging 1000 pcs. per 13-inch reel

Product Dimensions



Recommended Layout



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



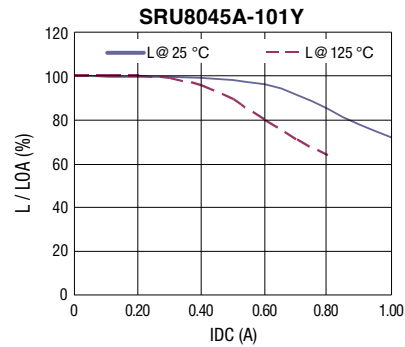
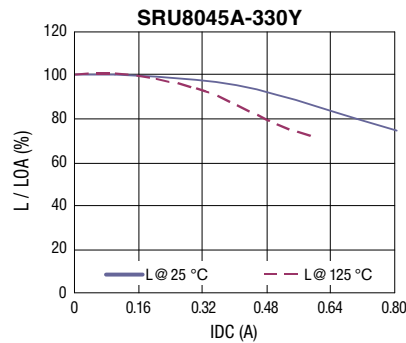
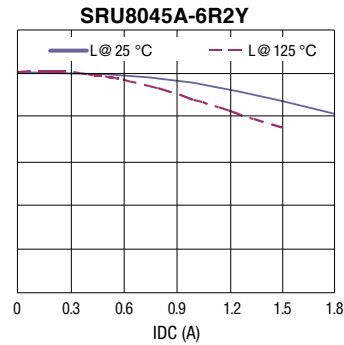
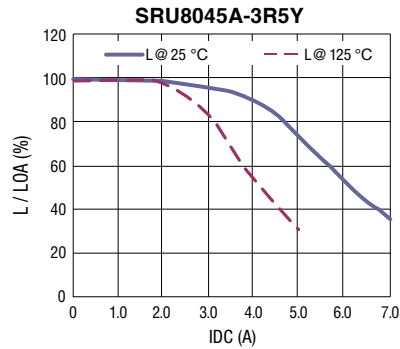
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
 **Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.
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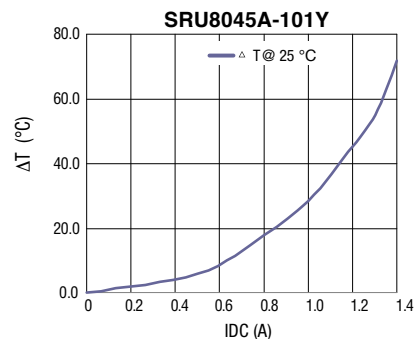
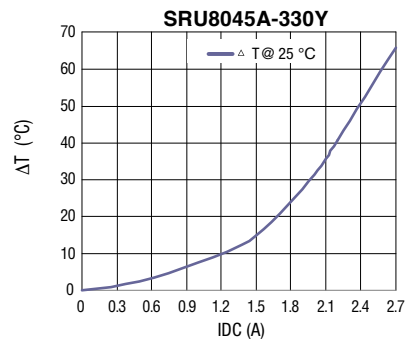
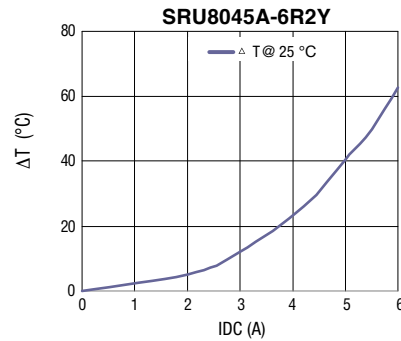
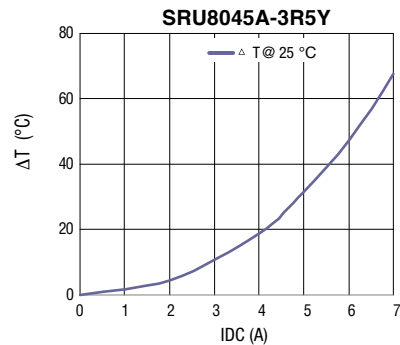
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Inductance vs. IDC



Temperature vs. IDC



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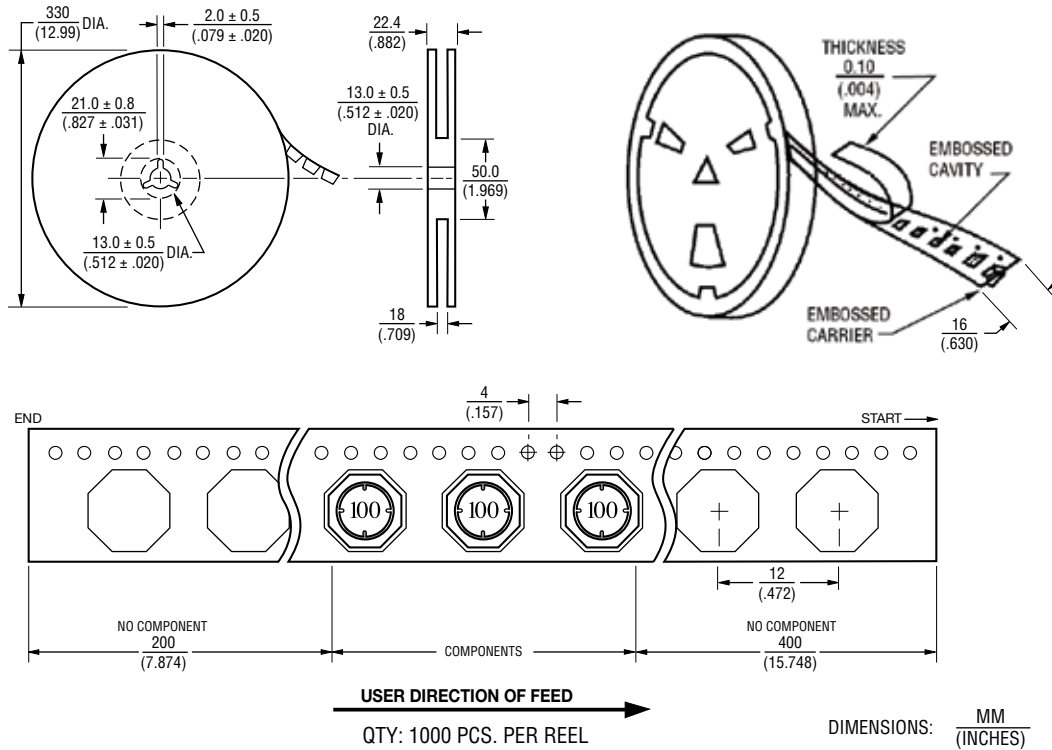
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SRU8045A Series - Shielded Power Inductors

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Packaging Specifications



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The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

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