



Features

- Semi-shielded construction
- High rated current
- Component height 4.5 mm
- Inductance range: 1 to 220 μ H
- Rated current up to 4.2 A
- RoHS compliant* and halogen free**

Applications

- DC/DC converters
- Notebook computers
- Digital video cameras
- HDDs
- Cell phones
- Televisions, LCD displays

SRN6045 Series - Semi-shielded Power Inductors

Electrical Specifications @ 25 °C

| Bourns Part No. | Inductance @ 100 KHz/1 V | | Q (Ref.) | Test Freq. (MHz) | SRF (MHz) Typ. | DCR (Ω) Max. | I _{rms} (A) | I _{sat} (A) |
|-----------------|--------------------------|--------|----------|------------------|----------------|-----------------------|----------------------|----------------------|
| | L (μ H) | Tol. % | | | | | | |
| SRN6045-1R0Y | 1.0 | 30 | 15 | 7.96 | 50 | 0.0139 | 4.2 | 8.5 |
| SRN6045-1R3Y | 1.3 | 30 | 15 | 7.96 | 48 | 0.017 | 4.0 | 8.0 |
| SRN6045-1R8Y | 1.8 | 30 | 15 | 7.96 | 38 | 0.0198 | 3.7 | 7.0 |
| SRN6045-2R2Y | 2.2 | 30 | 15 | 7.96 | 35 | 0.0251 | 3.5 | 6.0 |
| SRN6045-3R3Y | 3.3 | 30 | 15 | 7.96 | 27 | 0.0302 | 3.2 | 5.0 |
| SRN6045-4R7Y | 4.7 | 30 | 15 | 7.96 | 22 | 0.0376 | 3.0 | 4.0 |
| SRN6045-6R8Y | 6.8 | 30 | 15 | 7.96 | 20 | 0.0473 | 2.8 | 3.8 |
| SRN6045-8R2Y | 8.2 | 30 | 15 | 7.96 | 18 | 0.055 | 2.7 | 3.3 |
| SRN6045-100M | 10 | 20 | 17 | 2.52 | 15 | 0.0586 | 2.5 | 3.0 |
| SRN6045-150M | 15 | 20 | 17 | 2.52 | 13 | 0.0958 | 1.9 | 2.3 |
| SRN6045-220M | 22 | 20 | 17 | 2.52 | 11 | 0.142 | 1.5 | 1.9 |
| SRN6045-330M | 33 | 20 | 17 | 2.52 | 9 | 0.188 | 1.4 | 1.5 |
| SRN6045-470M | 47 | 20 | 13 | 2.52 | 7 | 0.257 | 1.1 | 1.3 |
| SRN6045-680M | 68 | 20 | 13 | 2.52 | 6 | 0.351 | 0.9 | 1.0 |
| SRN6045-101M | 100 | 20 | 22 | 0.796 | 5 | 0.494 | 0.7 | 0.8 |
| SRN6045-221M | 220 | 20 | 25 | 0.796 | 4 | 1.18 | 0.6 | 0.7 |

General Specifications

Operating Temperature -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature .. -40 °C to +125 °C
 Resistance to Solder Heat +250 °C for 10 sec.
 Temperature Rise 40 °C at rated I_{rms}
 Rated Current Inductance drops 30 % at I_{sat}

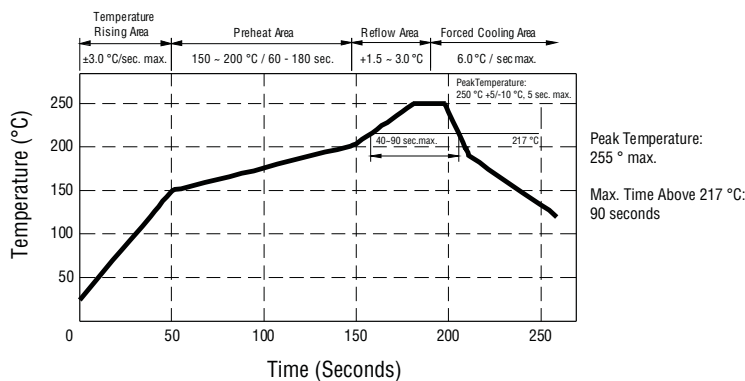
Materials

Core Ferrite
 Wire Enameled copper
 Terminal Finish Sn/Ag/Cu
 Coating Magnetic epoxy resin
 Packaging 1000 pcs. per 13-inch reel

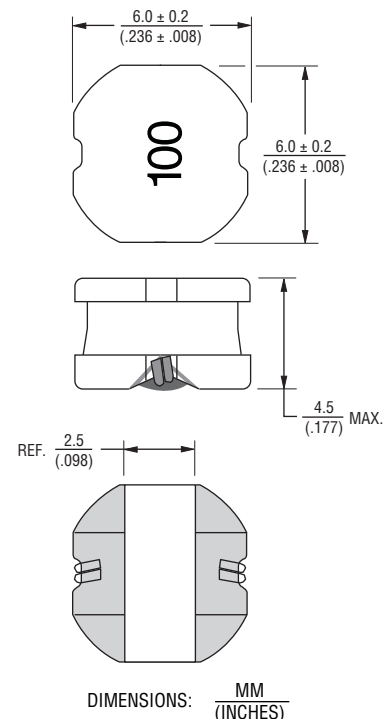
How to Order

Model SRN6045 - 100M
 Value Code (see table) _____

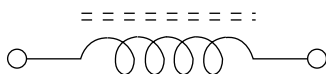
Soldering Profile



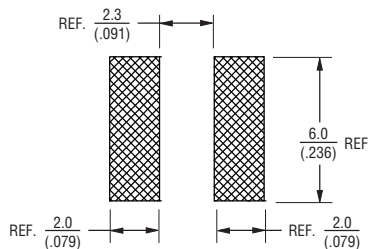
Product Dimensions



Electrical Schematic



Recommended Layout



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

** Bourns follows the prevailing definition of "halogen free" in the industry. 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.

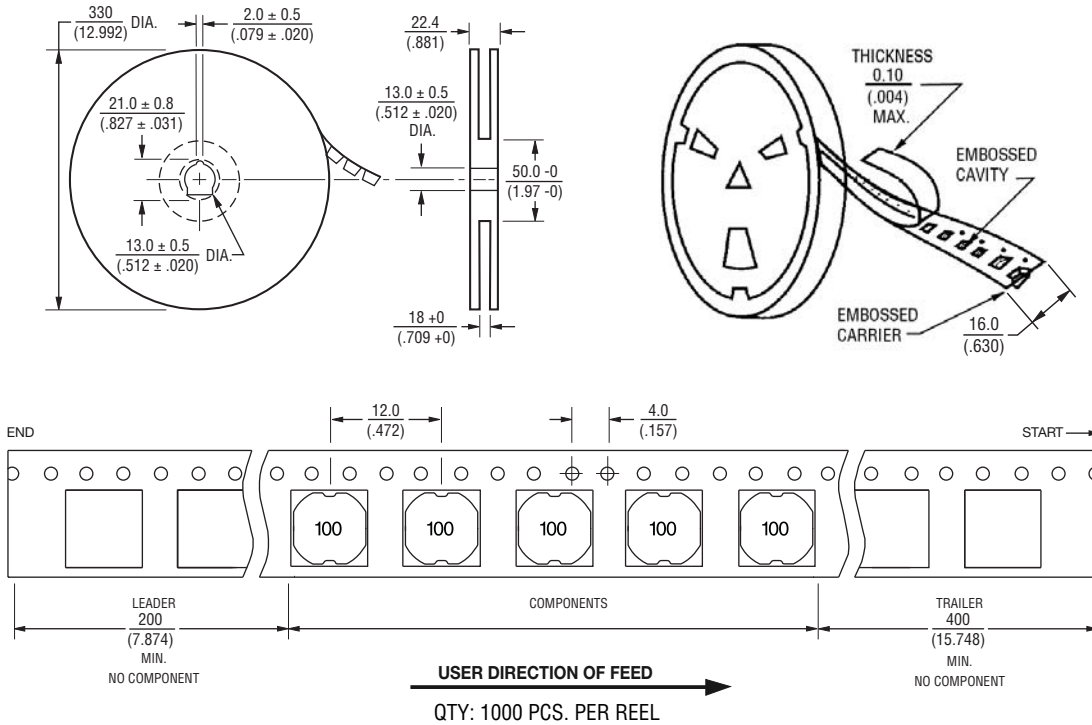
Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

SRN6045 Series - Semi-shielded Power Inductors

BOURNS®

Packaging Specifications



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

BOURNS®

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EMEA: Tel: +36 88 520 390 • Fax: +36 88 520 211

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REV. 12/14

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