



Features

- Semi-shielded construction
- High rated current
- Component height: 4 mm
- Inductance range: 0.5 to 100 μ H
- Rated current up to 10 A
- RoHS compliant* and halogen free**

Applications

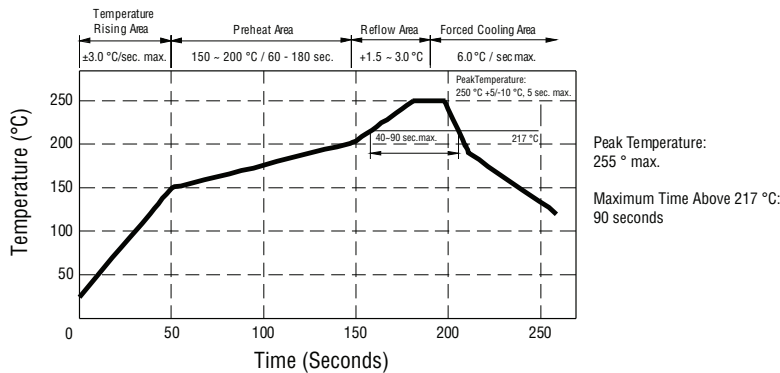
- DC/DC converters
- Notebook computers
- Digital video cameras
- HDDs
- Cell phones
- Televisions, LCD displays

SRN8040 Series - Semi-shielded Power Inductors

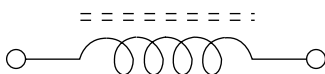
Electrical Specifications @ 25 °C

| 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. % | | | | | | |
| SRN8040-R50Y | 0.5 | 30 | 13 | 7.96 | 125 | 0.007 | 10 | 12 |
| SRN8040-1R0Y | 1.0 | 30 | 13 | 7.96 | 75 | 0.01 | 7.8 | 11 |
| SRN8040-1R5Y | 1.5 | 30 | 13 | 7.96 | 55 | 0.011 | 7 | 8.2 |
| SRN8040-2R2Y | 2.2 | 30 | 13 | 7.96 | 40 | 0.013 | 6.3 | 7.4 |
| SRN8040-3R3Y | 3.3 | 30 | 13 | 7.96 | 34 | 0.021 | 5.6 | 5.5 |
| SRN8040-3R6Y | 3.6 | 30 | 13 | 7.96 | 32 | 0.022 | 4.9 | 5.3 |
| SRN8040-4R7Y | 4.7 | 30 | 13 | 7.96 | 28 | 0.024 | 4.1 | 4.7 |
| SRN8040-6R8Y | 6.8 | 30 | 13 | 7.96 | 23 | 0.033 | 3.9 | 4.2 |
| SRN8040-8R2Y | 8.2 | 30 | 13 | 7.96 | 20 | 0.045 | 3.7 | 4 |
| SRN8040-100M | 10 | 20 | 20 | 2.52 | 18 | 0.05 | 3.1 | 3.4 |
| SRN8040-150M | 15 | 20 | 15 | 2.52 | 14 | 0.07 | 2.4 | 2.7 |
| SRN8040-220M | 22 | 20 | 20 | 2.52 | 12 | 0.1 | 2.2 | 2.2 |
| SRN8040-330M | 33 | 20 | 20 | 2.52 | 10 | 0.145 | 1.7 | 1.9 |
| SRN8040-470M | 47 | 20 | 15 | 2.52 | 9 | 0.19 | 1.4 | 1.5 |
| SRN8040-680M | 68 | 20 | 20 | 2.52 | 7 | 0.275 | 1.1 | 1.2 |
| SRN8040-101M | 100 | 20 | 10 | 0.796 | 6 | 0.4 | 1 | 1 |

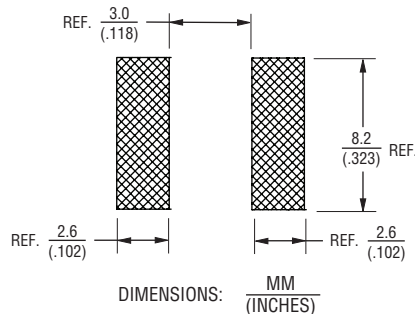
Soldering Profile



Electrical Schematic



Recommended Layout



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}

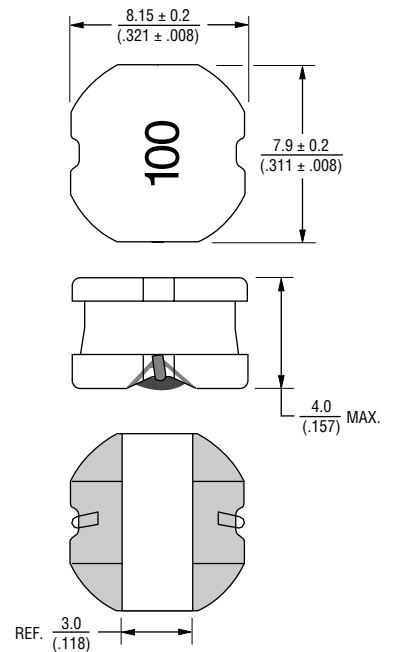
Materials

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 _____ SRN8040 - 100M
 Value Code (see table) _____

Product Dimensions



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

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

**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.

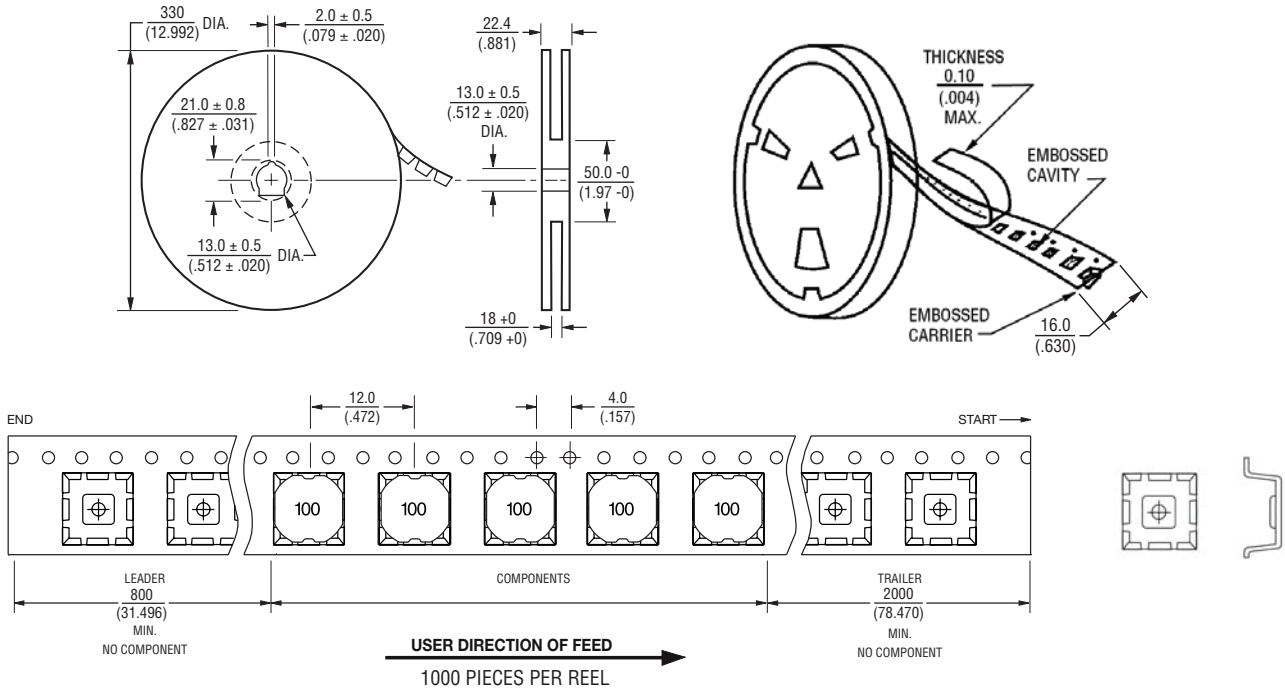
Specifications are subject to change without notice. Users should verify actual device performance in their specific applications.

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SRN8040 Series - Semi-shielded Power Inductors

BOURNS®

Packaging Specifications



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

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REV. 03/20

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