



**THE DATASHEET OF
SRN5040-270M**





Features

- Semi-shielded construction
- Inductance range: 1.5 to 47 μ H
- Rated current up to 3.6 A
- RoHS compliant* and halogen free**

Applications

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

SRN5040 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. | Irms (A) | Isat (A) |
|-----------------|----------------------------|--------|----------|------------------|----------------|-----------------------|----------|----------|
| | L (μ H) | Tol. % | | | | | | |
| SRN5040-1R5Y | 1.5 | 30 | 15 | 7.96 | 66 | 0.018 | 3.6 | 6.0 |
| SRN5040-2R2Y | 2.2 | 30 | 20 | 7.96 | 40 | 0.021 | 3.5 | 4.6 |
| SRN5040-3R3M | 3.3 | 20 | 20 | 7.96 | 30 | 0.027 | 3.3 | 3.8 |
| SRN5040-4R7M | 4.7 | 20 | 15 | 7.96 | 27 | 0.035 | 3.1 | 3.3 |
| SRN5040-6R8M | 6.8 | 20 | 15 | 7.96 | 21 | 0.059 | 2.3 | 2.6 |
| SRN5040-8R2M | 8.2 | 20 | 15 | 7.96 | 18 | 0.065 | 2.2 | 2.4 |
| SRN5040-100M | 10 | 20 | 17 | 7.96 | 17 | 0.068 | 2.1 | 2.3 |
| SRN5040-150M | 15 | 20 | 17 | 2.52 | 15 | 0.096 | 1.8 | 2.0 |
| SRN5040-220M | 22 | 20 | 17 | 2.52 | 11 | 0.152 | 1.4 | 1.6 |
| SRN5040-270M | 27 | 20 | 17 | 2.52 | 9 | 0.198 | 1.3 | 1.4 |
| SRN5040-330M | 33 | 20 | 17 | 2.52 | 8 | 0.216 | 1.2 | 1.3 |
| SRN5040-470M | 47 | 20 | 15 | 2.52 | 7 | 0.324 | 0.9 | 1.1 |

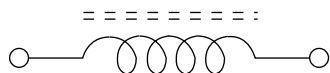
General Specifications

Operating Temperature -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature (Component) -40 °C to +125 °C
 Resistance to Solder Heat +260 °C for 10 sec.
 Temperature Rise 40 °C at rated Irms
 Rated Current Inductance drops 30 % at Isat
 Moisture Sensitivity Level 1
 ESD Classification (HBM) N/A

Materials

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

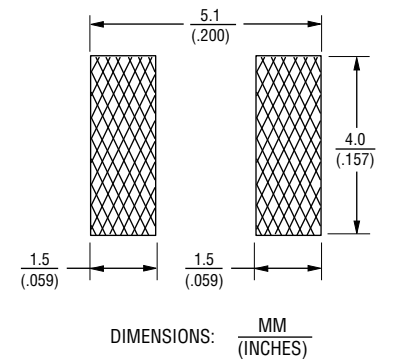
Electrical Schematic



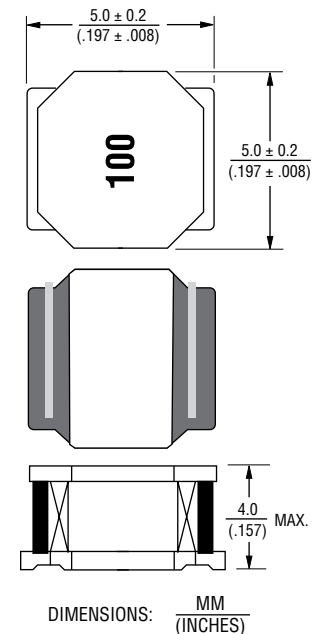
How to Order

SRN5040 - 4R7M
 Model _____
 Value Code (see table) _____

Recommended Layout



Product Dimensions



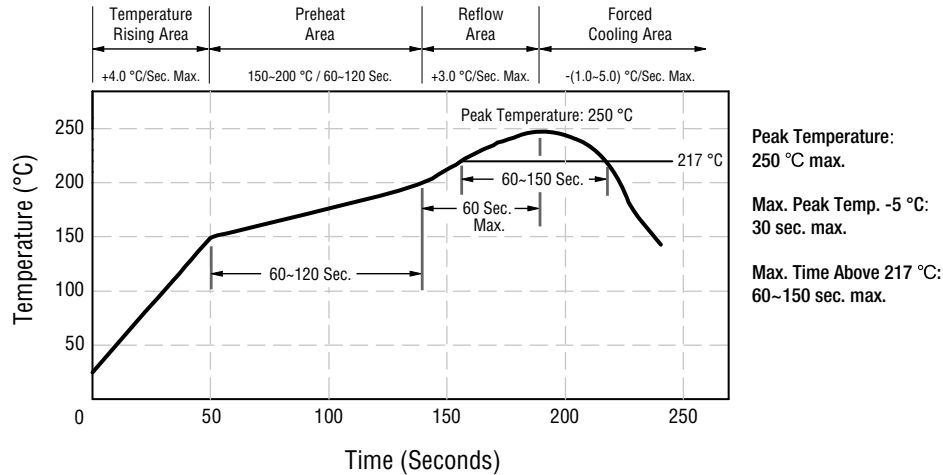
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* 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.
 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

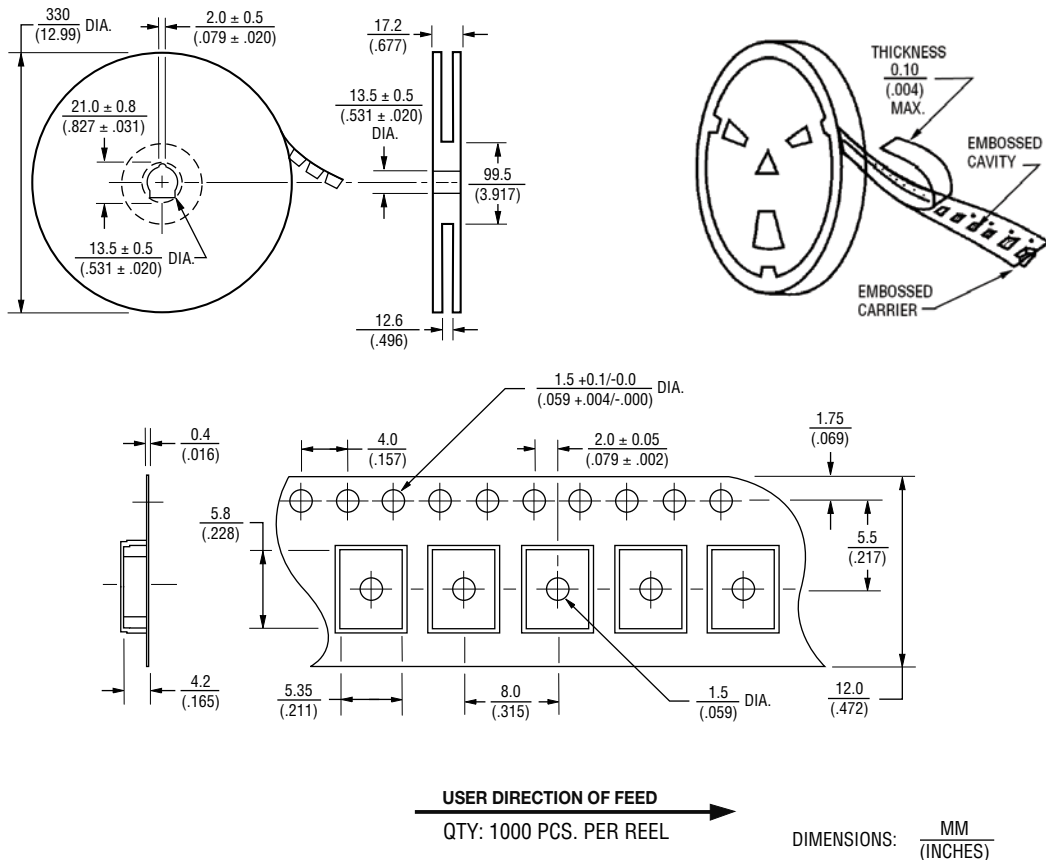
SRN5040 Series - Semi-shielded Power Inductors

BOURNS®

Soldering Profile



Packaging Specifications



REV. 08/17

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