



**THE DATASHEET OF  
SRN5040-1R5Y**





## Features

- Semi-shielded construction
- Inductance range: 1.5 to 47  $\mu$ 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 ( $\Omega$ ) Max.	Irms (A)	Isat (A)
	L ( $\mu$ 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

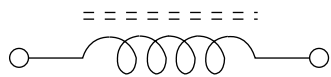
## General Specifications

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 ..... Enameled copper  
 Terminal Finish ..... Sn  
 Coating ..... Magnetic epoxy resin  
 Packaging ..... 1000 pcs. per 13-inch reel

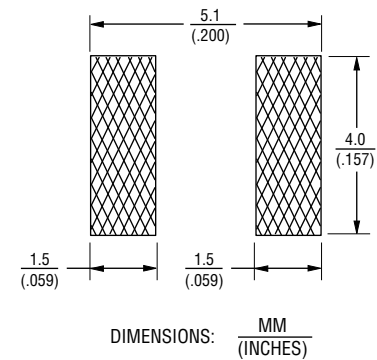
## Electrical Schematic



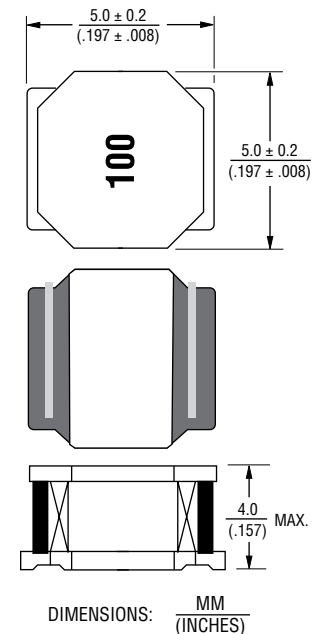
## How to Order

SRN5040 - 4R7M  
 Model \_\_\_\_\_  
 Value Code (see table) \_\_\_\_\_

## Recommended Layout



## Product Dimensions



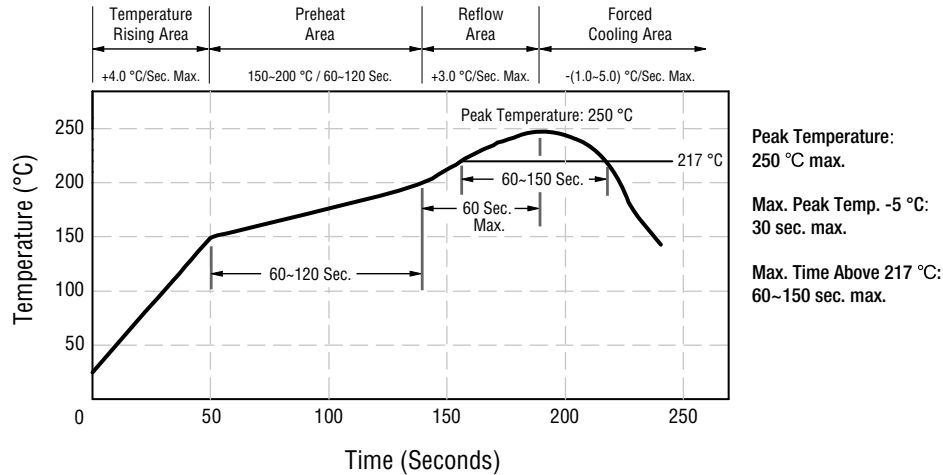
**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\* 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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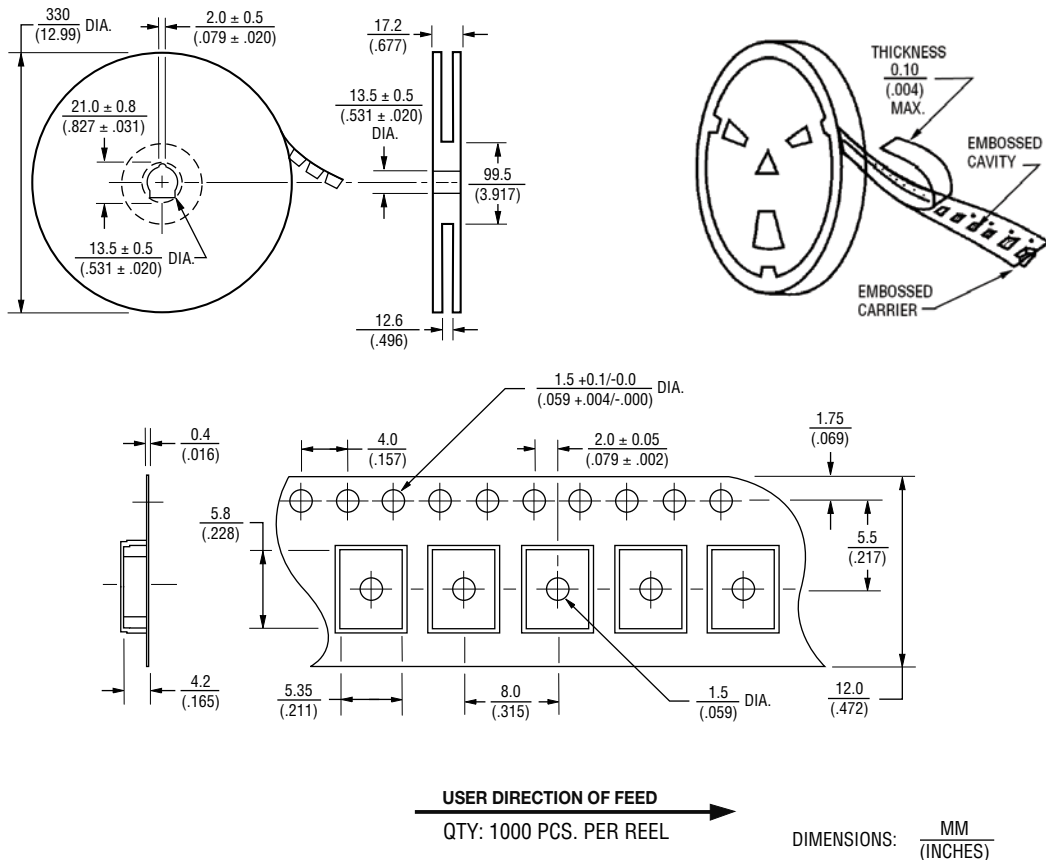
# SRN5040 Series - Semi-shielded Power Inductors

**BOURNS®**

## Soldering Profile



## Packaging Specifications



REV. 08/17

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Users should verify actual device performance in their specific applications.

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-  Shortage Management
-  Alternative Solution
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