



**THE DATASHEET OF  
SRN8040-3R6Y**





### Features

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

### Applications

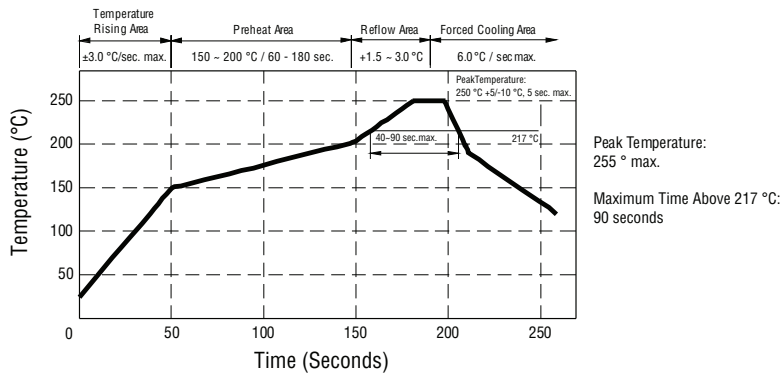
- DC/DC converters
- Notebook computers
- Digital video cameras
- HDDs
- Cell phones
- Televisions, LCD displays

## SRN8040 Series - Semi-shielded Power Inductors

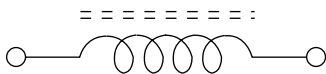
### Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 100 KHz / 1 V		Q (Ref.)	Test Freq. (MHz)	SRF (MHz) Typ.	DCR ( $\Omega$ ) Max.	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)
	L ( $\mu$ 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

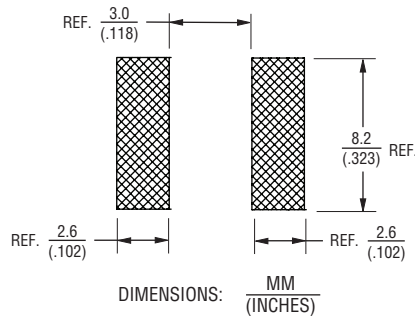
### Soldering Profile



### 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<sub>rms</sub>  
 Rated Current ..... Inductance drops 30 % at I<sub>sat</sub>

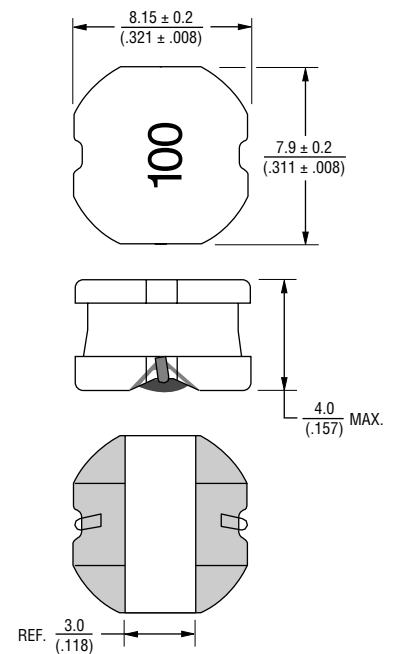
### Materials

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 \_\_\_\_\_  
 Value Code (see table) \_\_\_\_\_  
**SRN8040 - 100M**

### Product Dimensions



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

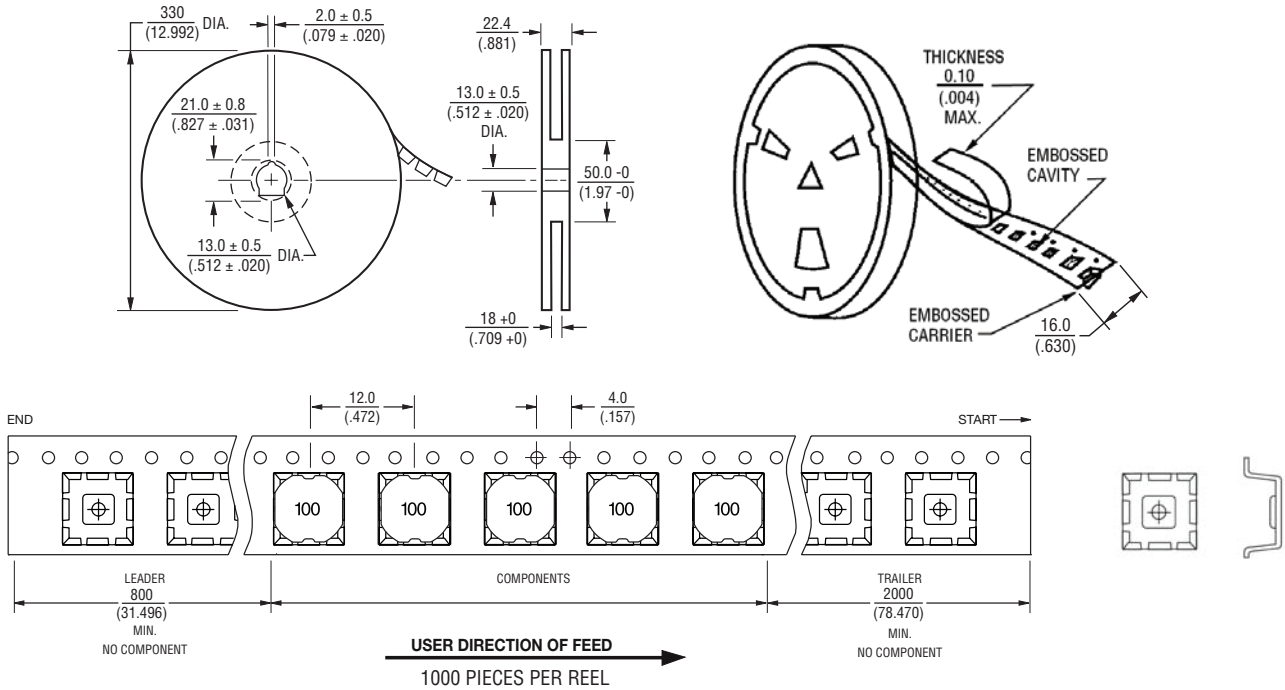
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# SRN8040 Series - Semi-shielded Power Inductors

**BOURNS®**

## Packaging Specifications



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

**BOURNS®**

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REV. 03/20

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