



### Features

- Semi-shielded construction
- Miniature size
- Low profile - 1.0 mm max.
- Inductance range: 1 to 47  $\mu$ H
- Rated current up to 2.3 A
- RoHS compliant\* and halogen free\*\*

### Applications

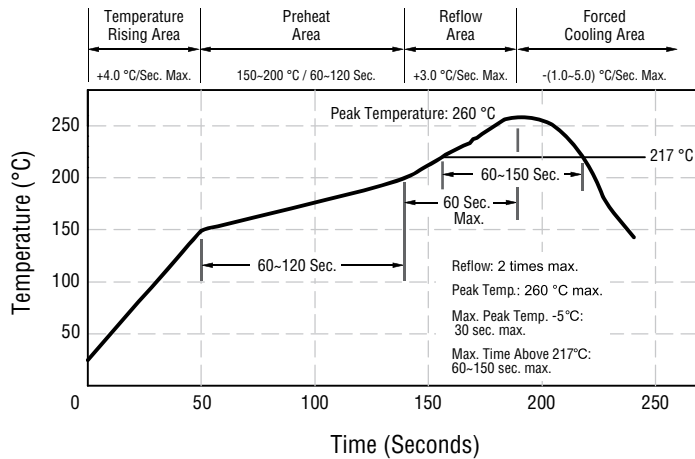
- DC/DC converters
- Notebook computers
- Digital video cameras
- HDDs
- Cell phones
- Televisions, LCD displays

## SRN3010 Series - Semi-shielded Power Inductors

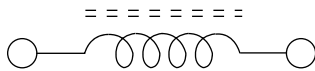
### Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 100 KHz / 1 V		Q (Ref.)	Test Freq. (MHz)	SRF (MHz) Typ.	DCR ( $\Omega$ ) Max.	I <sub>rms</sub> (A)	Isat (A)
	L ( $\mu$ H)	Tol. %						
SRN3010-1R0Y	1.0	30	7	7.96	140	0.063	2.3	2.3
SRN3010-1R2Y	1.2	30	7	7.96	130	0.081	2.1	1.9
SRN3010-1R5Y	1.5	30	7	7.96	110	0.091	2.0	1.65
SRN3010-2R2M	2.2	20	7	7.96	85	0.096	1.9	1.3
SRN3010-3R3M	3.3	20	7	7.96	70	0.156	1.8	1.05
SRN3010-4R7M	4.7	20	7	7.96	60	0.210	1.7	0.85
SRN3010-6R8M	6.8	20	7	7.96	50	0.312	1.3	0.7
SRN3010-100M	10	20	11	2.52	40	0.420	0.9	0.6
SRN3010-150M	15	20	11	2.52	30	0.612	0.8	0.5
SRN3010-220M	22	20	14	2.52	23	0.936	0.7	0.4
SRN3010-330M	33	20	14	2.52	20	1.320	0.5	0.32
SRN3010-470M	47	20	20	2.52	16	1.920	0.35	0.28

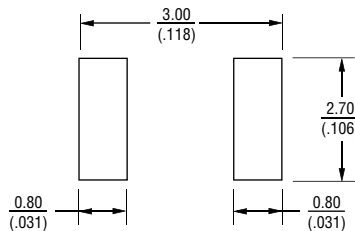
### Soldering Profile



### Electrical Schematic



### Recommended Layout



### 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 I<sub>rms</sub>  
 Rated Current ..... Inductance drops 30 % at Isat  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM) ..... N/A

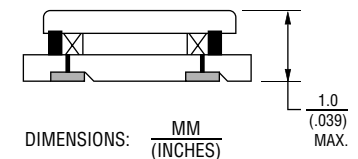
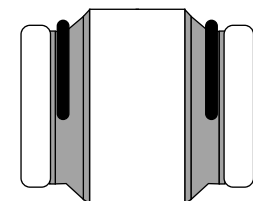
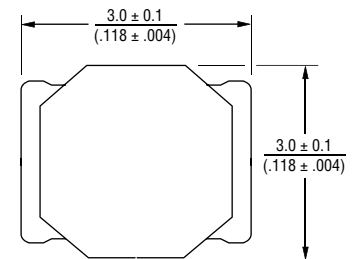
### Materials

Core ..... Ferrite  
 Wire ..... Enameled copper  
 Terminal Finish ..... Sn/Ag/Cu  
 Coating ..... Magnetic epoxy resin  
 Packaging ..... 2000 pcs. per 7-inch reel

### How to Order

**SRN3010 - 100M**  
 Model \_\_\_\_\_  
 Value Code (see table) \_\_\_\_\_

### Product Dimensions



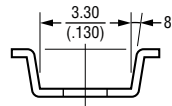
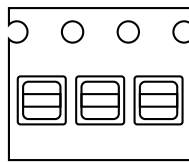
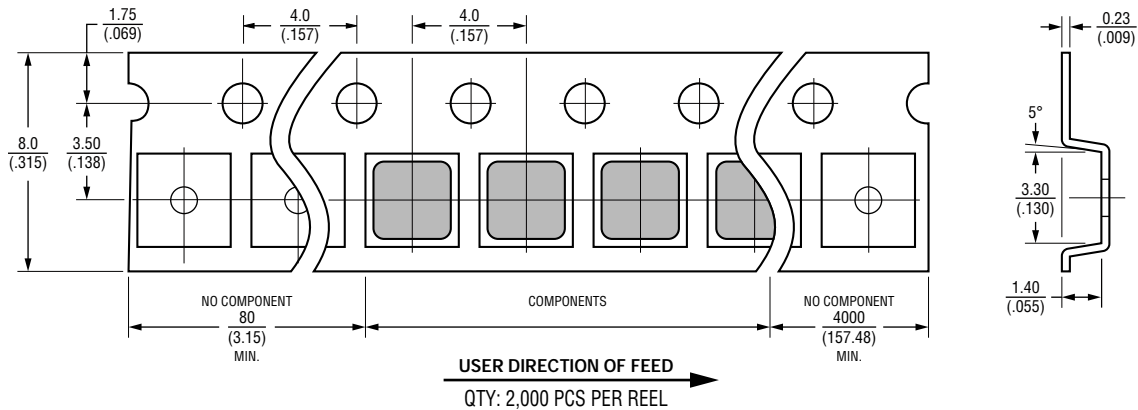
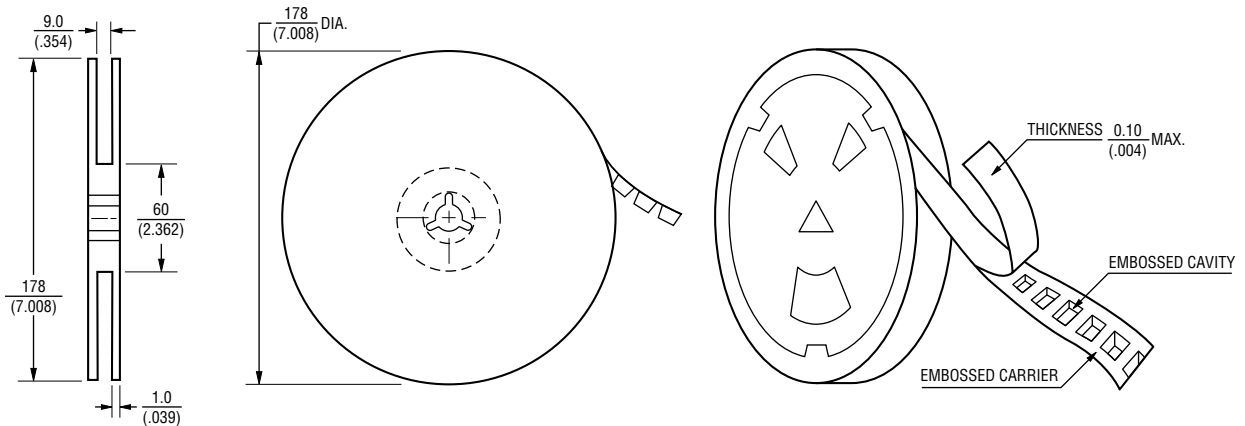
**WARNING**  
**Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\* RoHS Directive 2015/863, Mar 31, 2015 and Annex.  
 \*\* Bourns 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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# SRN3010 Series - Semi-shielded Power Inductors

**BOURNS®**

## Packaging Specifications



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

**BOURNS®**

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REV. 11/19

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Users should verify actual device performance in their specific applications.

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