



### 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

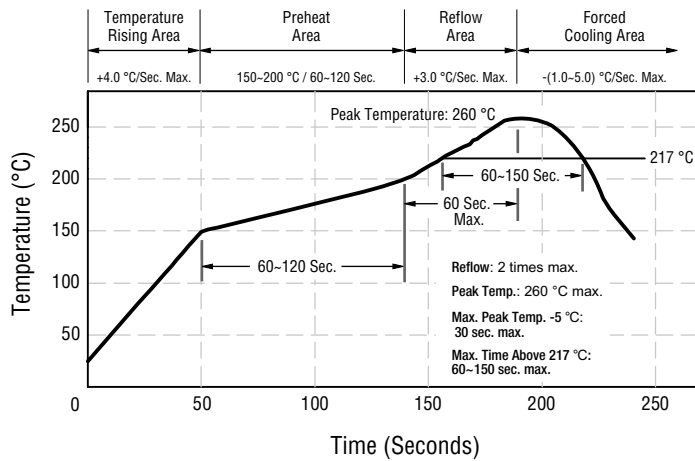
- DC/DC converters
- Notebook computers
- Digital video cameras
- HDDs
- Cell phones
- Televisions, LCD displays

## SRN3010 Series - Semi-shielded Power Inductors

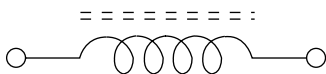
### Electrical Specifications @ 25 °C

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

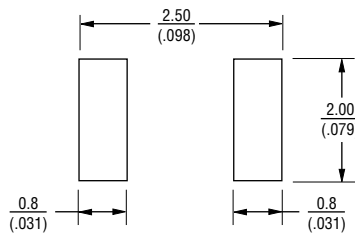
### Soldering Profile



### 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 I<sub>sat</sub>

Moisture Sensitivity Level ..... 1

ESD Classification (HBM) ..... 3B

### Materials

Core ..... Ferrite

Wire ..... Enameled copper

Terminal Finish ..... Sn

Coating ..... Magnetic epoxy resin

Packaging ..... 2000 pcs. per 7-inch reel

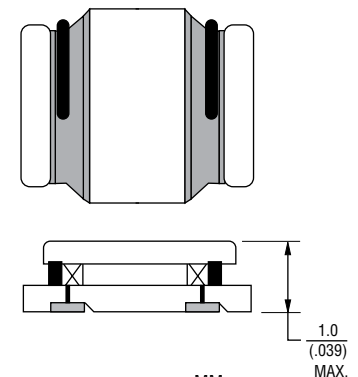
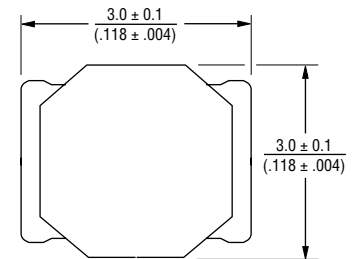
### How to Order

**SRN3010 - 100M**

Model \_\_\_\_\_

Value Code (see table) \_\_\_\_\_

### Product Dimensions



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

\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

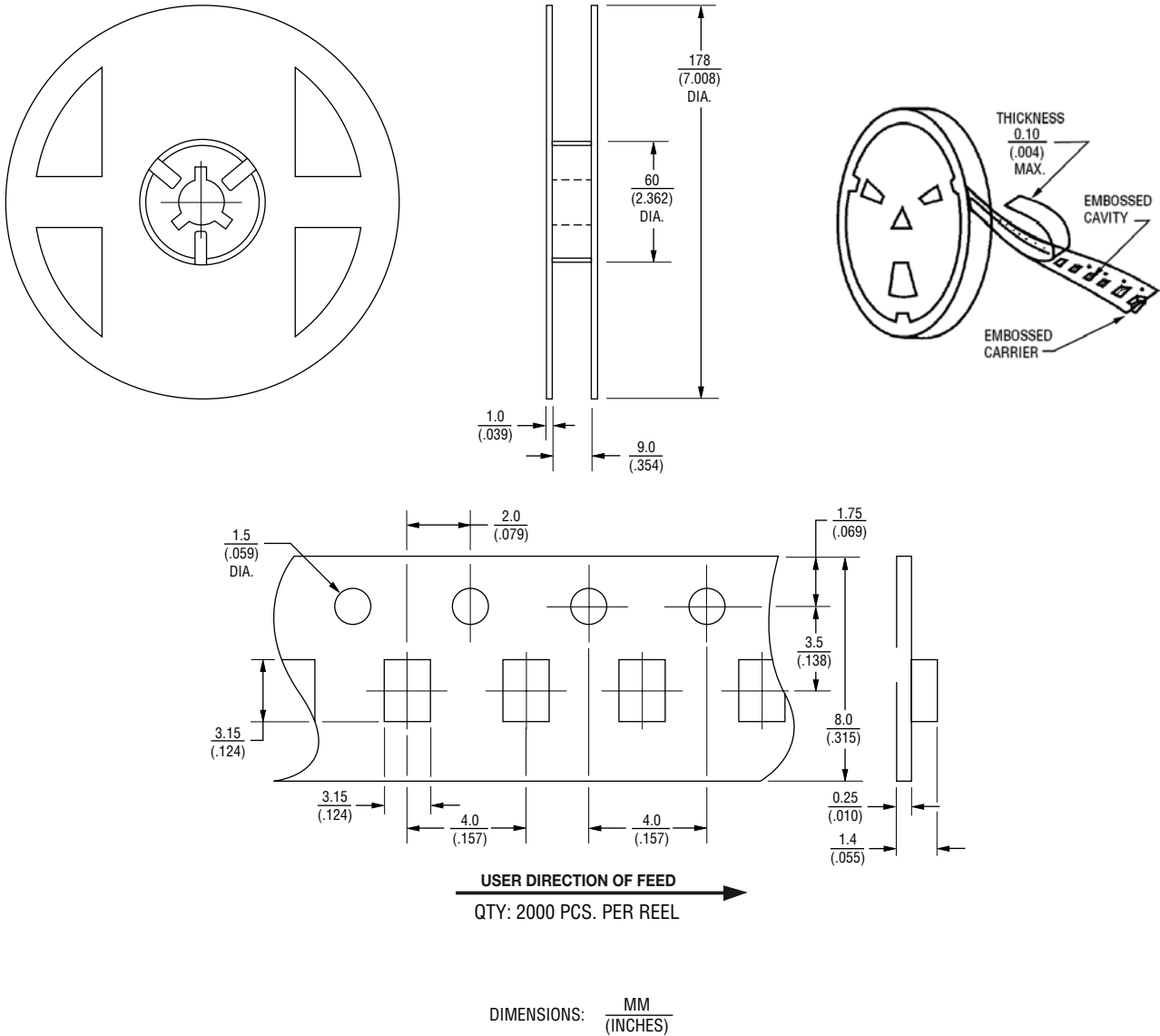
\*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

Specifications are subject to change without notice.  
 The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.  
 Users should verify actual device performance in their specific applications.

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**BOURNS®**

## Packaging Specifications



REV. 06/17

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