



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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## 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     |

### General Specifications

Operating Temperature ..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature .. -25 °C to +120 °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

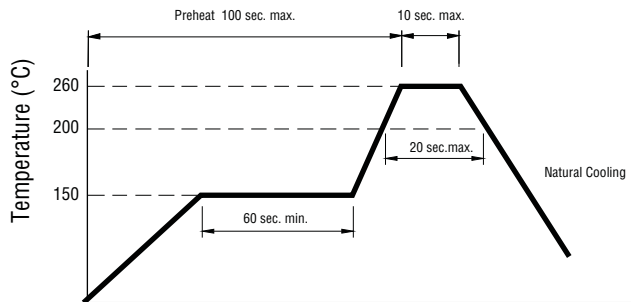
### Materials

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

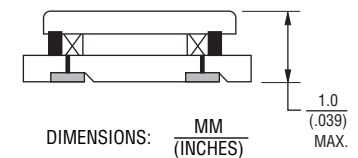
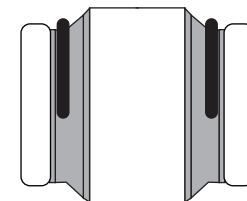
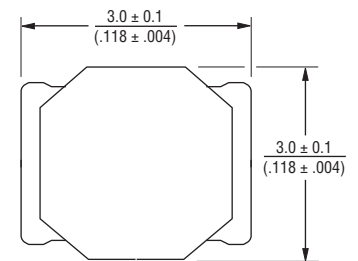
### How to Order

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

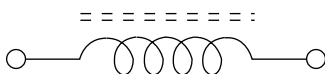
### Soldering Profile



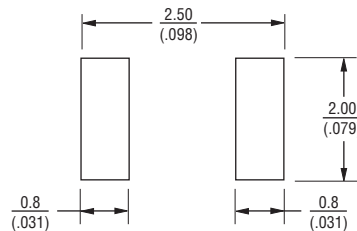
### Product Dimensions



### Electrical Schematic



### Recommended Layout



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

\*\* 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.

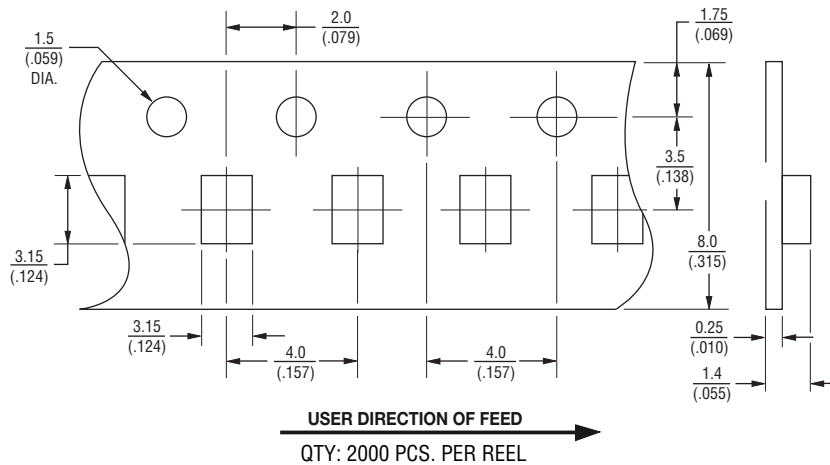
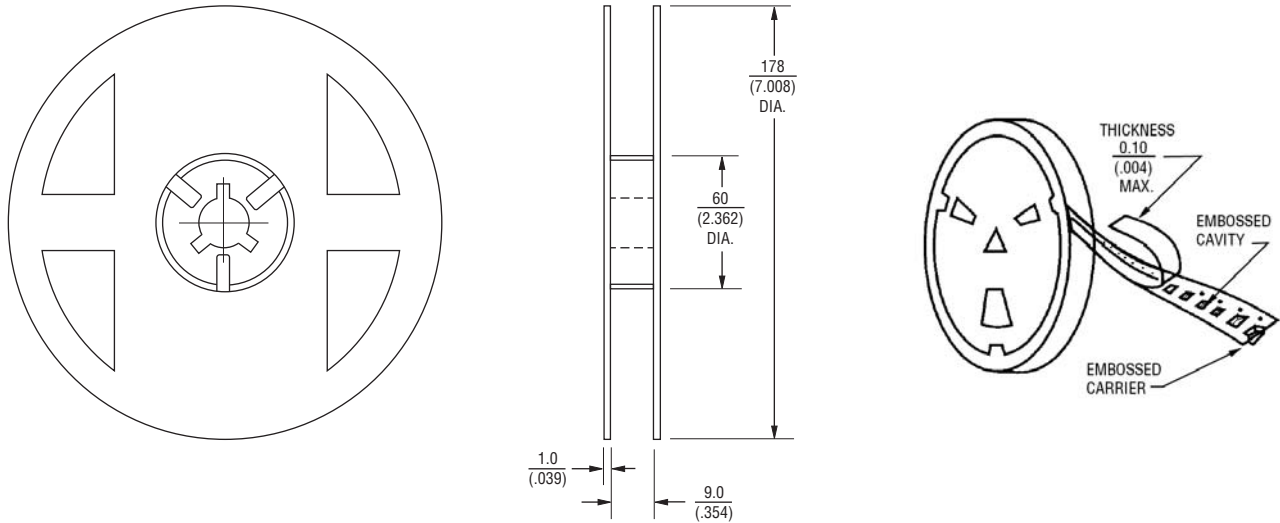
Specifications are subject to change without notice.

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.

# SRN3010 Series - Semi-shielded Power Inductors

**BOURNS®**

## Packaging Specifications



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

**BOURNS®**

Asia-Pacific: Tel: +886-2 2562-4117 • Fax: +886-2 2562-4116

EMEA: Tel: +36 88 520 390 • Fax: +36 88 520 211

The Americas: Tel: +1-951 781-5500 • Fax: +1-951 781-5700

[www.bourns.com](http://www.bourns.com)

REV. 12/14

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