



## Features

- Semi-shielded construction
- Miniature size
- Component height 1.5 mm
- Inductance range: 1 to 100  $\mu$ H
- Rated current up to 2.35 A
- RoHS compliant\* and halogen free\*\*

## Applications

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

# SRN3015 Series - Semi-shielded Power Inductors

## Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 0.1 V / 1 MHz		Q (Ref.)	Test Freq. (MHz)	SRF (MHz) Typ.	DCR ( $\Omega$ ) Max.	SRF (MHz) Min.	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)
	L ( $\mu$ H)	Tol. %							
SRN3015-1R0Y	1.0	± 30	10	7.96	105	0.048	145	2.35	2.35
SRN3015-1R5Y	1.5	± 30	10	7.96	90	0.066	130	2.10	2.00
SRN3015-2R2M	2.2	± 20	10	7.96	70	0.072	90	1.80	1.65
SRN3015-3R3M	3.3	± 20	10	7.96	47	0.112	75	1.60	1.40
SRN3015-4R7M	4.7	± 20	10	7.96	43	0.136	65	1.40	1.20
SRN3015-6R8M	6.8	± 20	10	7.96	35	0.211	50	1.10	1.05
SRN3015-100M	10	± 20	10	2.52	30	0.276	45	1.00	0.88
SRN3015-150M	15	± 20	17	2.52	22	0.422	33	0.80	0.68
SRN3015-180M	18	± 20	17	2.52	20	0.546	30	0.65	0.62
SRN3015-220M	22	± 20	17	2.52	16	0.622	28	0.60	0.58
SRN3015-330M	33	± 20	20	2.52	14	0.959	22	0.50	0.46
SRN3015-470M	47	± 20	27	2.52	11	1.406	18	0.40	0.38
SRN3015-101M	100	± 20	27	2.52	7.5	2.920	11	0.29	0.27

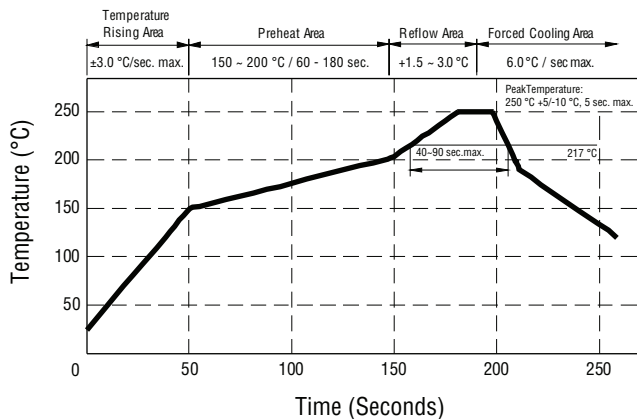
## General Specifications

Operating Temperature ..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature ..... -40 °C to +85 °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) ..... N/A

## Materials

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

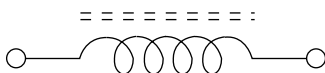
## Soldering Profile



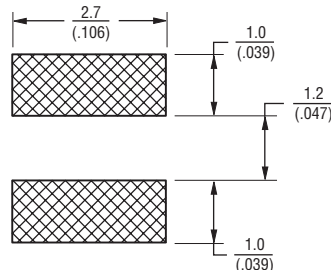
Peak Temperature: 255 ° max.

Maximum Time Above 217 °C: 90 seconds

## Electrical Schematic



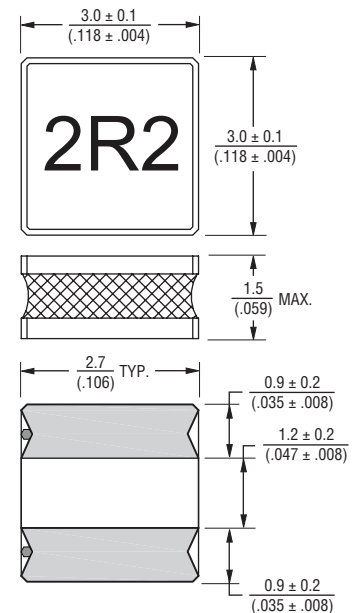
## Recommended Layout



## How to Order

SRN3015 - 100M  
 Model \_\_\_\_\_  
 Value Code (see table) \_\_\_\_\_

## Product Dimensions



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

\* RoHS Directive 2002/95/EC Jan 27, 2003 including 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.

Specifications are subject to change without notice.

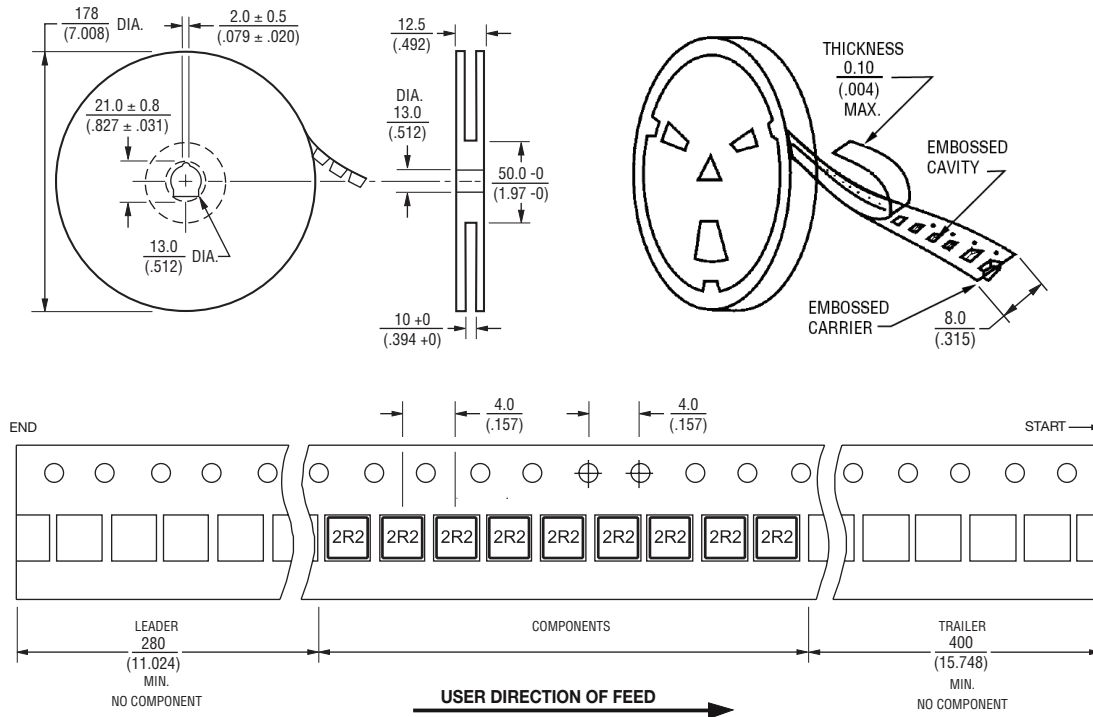
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

# SRN3015 Series - Semi-shielded Power Inductors

**BOURNS®**

## Packaging Specifications



QTY: 2000 PCS. PER REEL

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

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