



**THE DATASHEET OF  
SRN2010-R68M**





## Features

- Semi-shielded construction
- Miniature size
- Low profile: 1.0 mm
- Inductance range: 0.24 to 2.2  $\mu$ H
- Rated current up to 4.4 A
- RoHS compliant\* and halogen free\*\*

## Applications

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

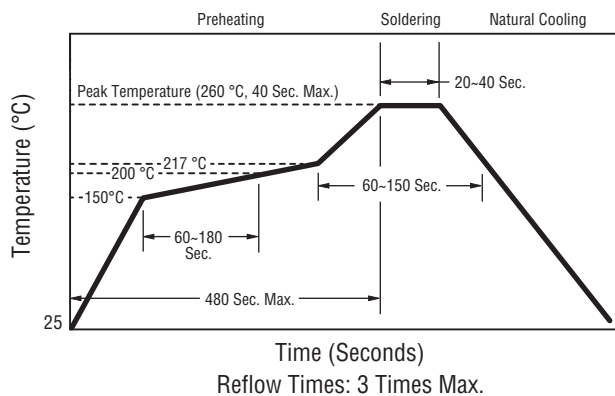
# SRN2010 Series - Semi-shielded Power Inductors

## Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 1 MHz / 0.1 V		Q (Ref.)	Test Freq. (MHz)	SRF (MHz) Min.	DCR ( $\Omega$ ) Max.	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)
	L ( $\mu$ H)	Tol. %						
SRN2010-R24M	0.24	20	8	1	370	0.028	4.4	5.1
SRN2010-R47M	0.47	20	9	1	230	0.042	3.3	3.8
SRN2010-R68M	0.68	20	10	1	200	0.055	2.8	3.2
SRN2010-1R0M	1.00	20	11	1	150	0.072	2.4	2.9
SRN2010-2R2M	2.20	20	14	1	100	0.170	1.7	2.0

## Soldering Profile

Peak Temperature: 260 °C max.  
 Max. Peak Temperature 260 °C: 40 sec. max.  
 Max. Time Above 217 °C: 60~150 sec. max.



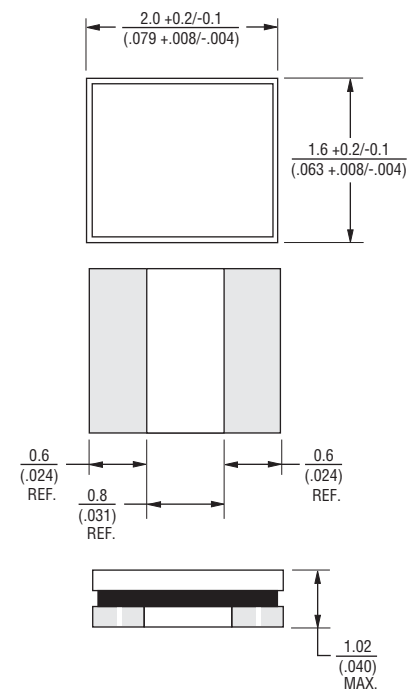
## General Specifications

Operating Temperature ..... -55 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature ..... -40 °C to +85 °C  
 Resistance to Solder Heat ..... +260 °C for 40 sec.  
 Temperature Rise ..... 40 °C at rated I<sub>rms</sub>  
 Rated Current ..... Inductance drops 30 % at I<sub>sat</sub>

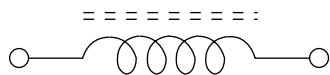
## Materials

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

## Product Dimensions



## Electrical Schematic



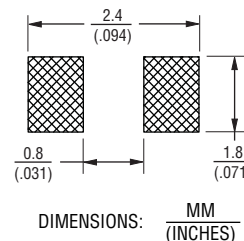
## How to Order

Model \_\_\_\_\_ SRN2010 - R68M  
 Value Code (see table) \_\_\_\_\_



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)

## Recommended Layout



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

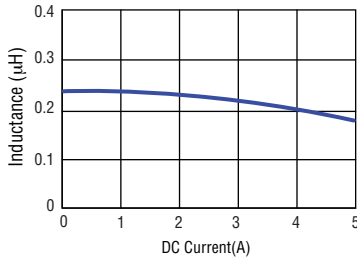
\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
 \*\*Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.  
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# SRN2010 Series - Semi-shielded Power Inductors

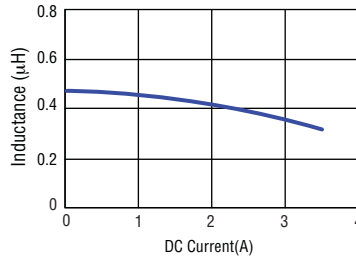
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## L vs. IDC

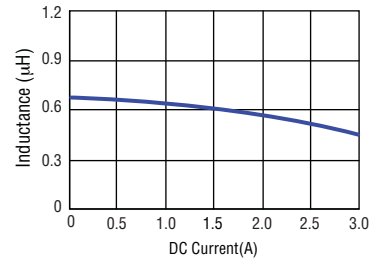
SRN2010-R24M



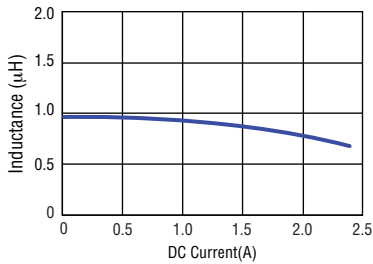
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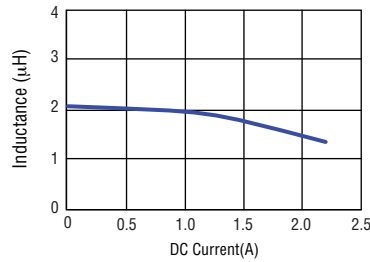
SRN2010-R68M



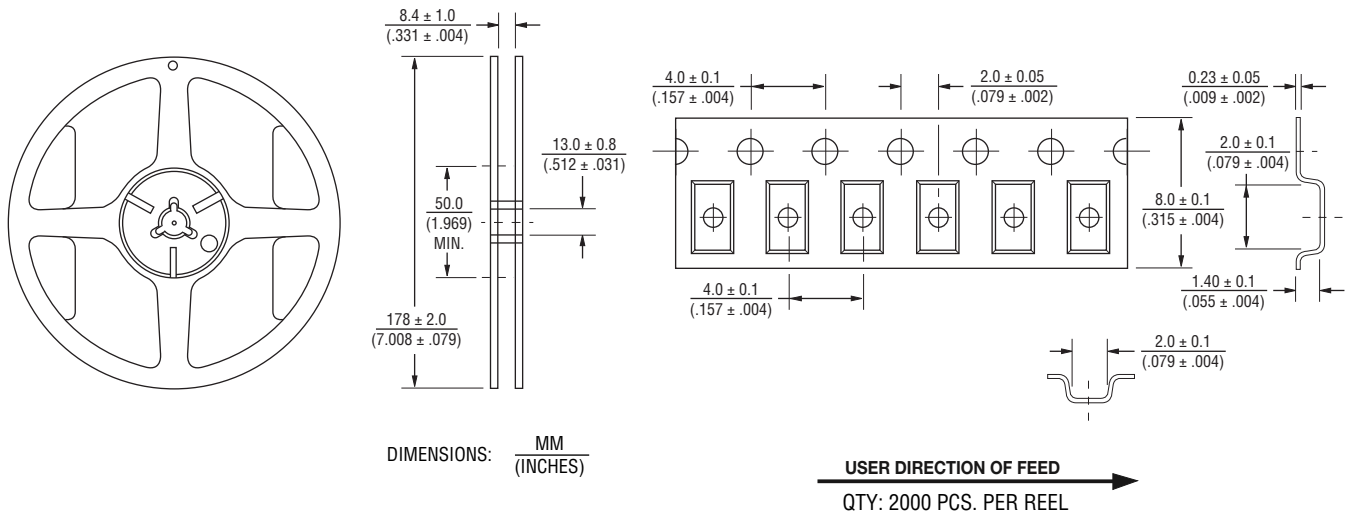
SRN2010-1R0M



SRN2010-2R2M



## Packaging Specifications



REV. 12/14

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