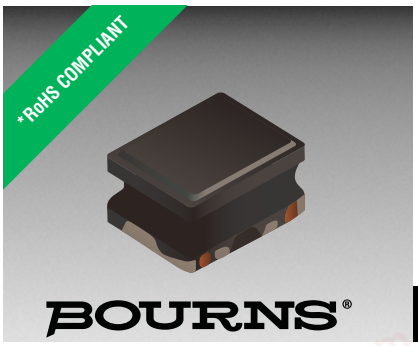
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Features

- Semi-shielded construction
- Miniature size
- Low profile: 1.2 mm
- Inductance range: 0.24 to 2.2 µH
- Rated current up to 3.5 A
- RoHS compliant* and halogen free**

Applications

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

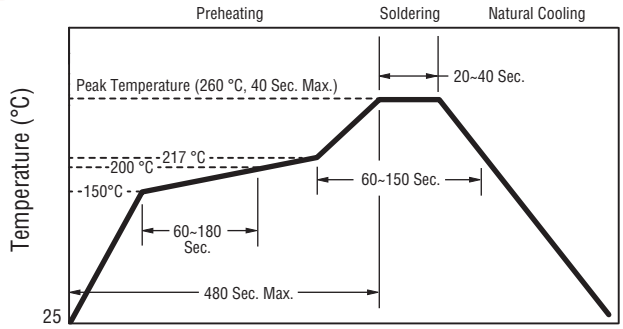
SRN2012 Series - Semi-shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 1 MHz / 0.1 V		DCR (Ω) Max.	Irms (A)	Isat (A)
	L (µH)	Tol. %			
SRN2012-R24M	0.24	20	0.033	3.5	4.8
SRN2012-R47M	0.47	20	0.046	2.9	3.5
SRN2012-1R0M	1.0	20	0.104	2.3	2.5
SRN2012-1R5M	1.5	20	0.108	1.8	2.0
SRN2012-2R2M	2.2	20	0.186	1.3	1.6

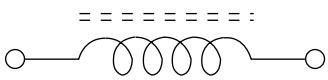
Soldering Profile

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



Reflow Times: 3 Times Max.

Electrical Schematic



How to Order

SRN2012 - R24M

Model
Value Code (see table)

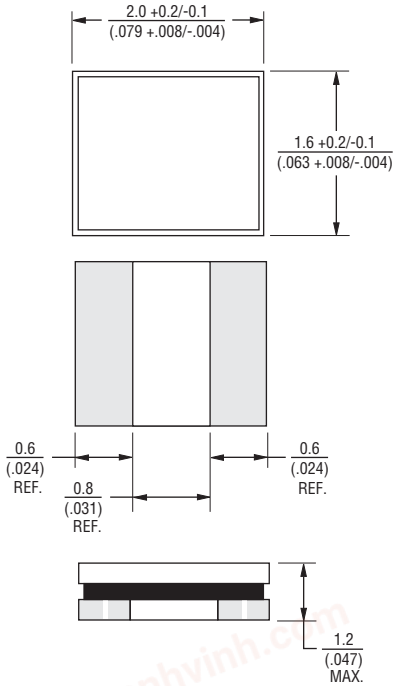
General Specifications

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 Irms
Rated Current ..... Inductance drops 30 % at Isat

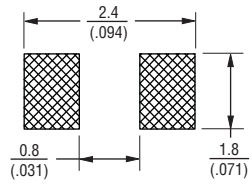
Materials

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

Product Dimensions



Recommended Layout



DIMENSIONS: MM (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

*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.

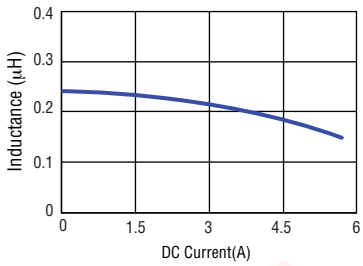
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SRN2012 Series - Semi-shielded Power Inductors

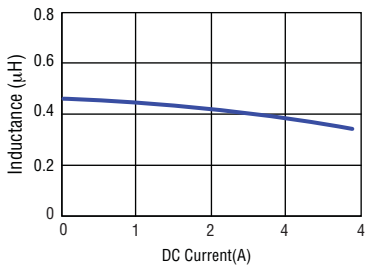
BOURNS®

L vs. IDC

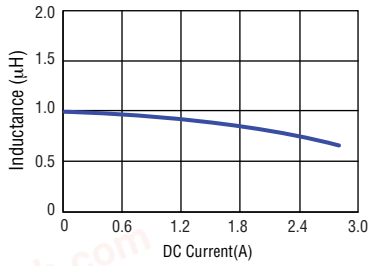
SRN2012-R24M



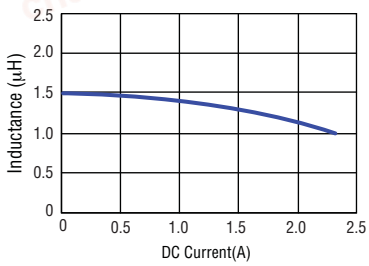
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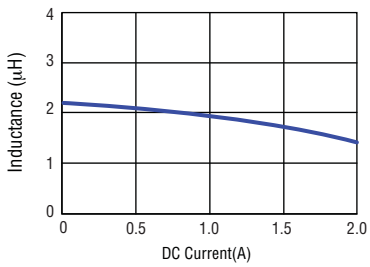
SRN2012-1R0M



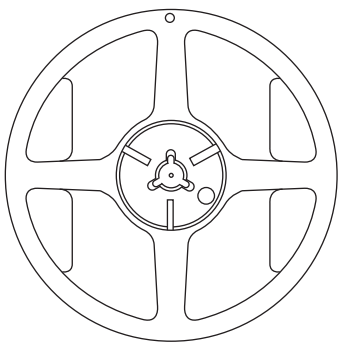
SRN2012-1R5M

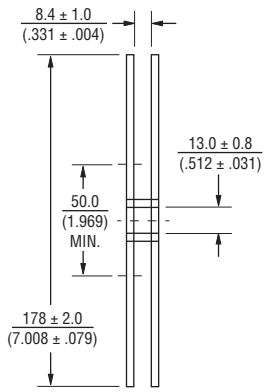


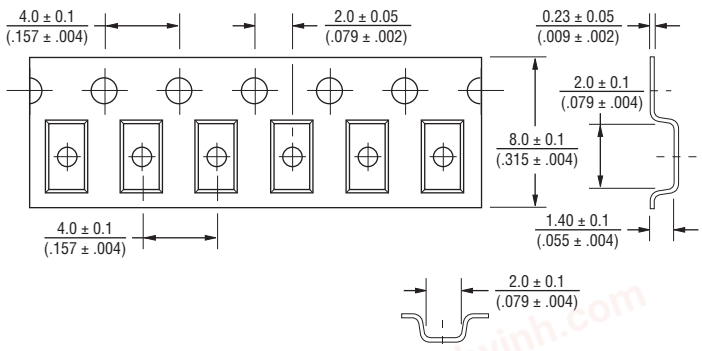
SRN2012-2R2M



Packaging Specifications







DIMENSIONS: MM / (INCHES)

USER DIRECTION OF FEED

QTY: 2000 PCS. PER REEL

05/14

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