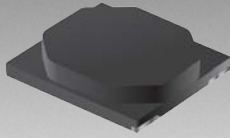


\*RoHS COMPLIANT



**BOURNS®**

**Features**

- Semi-shielded construction
- Low profile: 1.2 mm
- Inductance range: 0.47 to 22  $\mu$ H
- Rated current up to 3.2 A
- RoHS compliant\* and halogen free\*\*

**Applications**

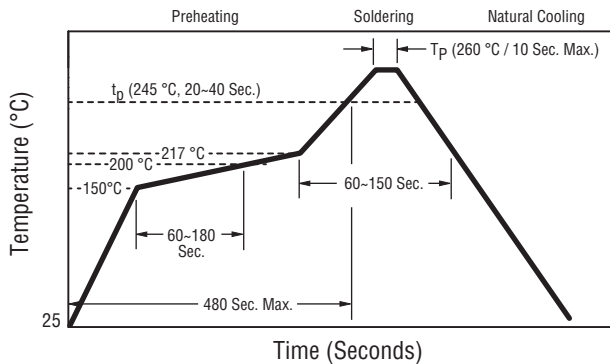
- DC/DC converters
- Notebook computers
- Digital video cameras
- HDDs
- Cellphones
- Televisions, LCD displays

**SRN4012T Series - Semi-shielded Power Inductors**

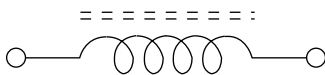
**Electrical Specifications @ 25 °C**

Bourns Part No.	Inductance @ 100 KHz / 1 V		Q (Min.) @ 100 kHz / 1 V	SRF (MHz) Typ.	DCR ( $\Omega$ ) $\pm 20$ %	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)
	L ( $\mu$ H)	Tol. %					
SRN4012T-R47M	0.47	$\pm 20$	6	140	0.025	3.2	4
SRN4012T-1R0M	1.0	$\pm 20$	6	100	0.042	2.2	2.8
SRN4012T-1R5M	1.5	$\pm 20$	6	90	0.05	2	2.2
SRN4012T-2R2M	2.2	$\pm 20$	6	70	0.06	1.9	1.65
SRN4012T-3R3M	3.3	$\pm 20$	6	60	0.07	1.7	1.4
SRN4012T-4R7M	4.7	$\pm 20$	6	45	0.095	1.5	1.2
SRN4012T-6R8M	6.8	$\pm 20$	6	35	0.125	1.3	0.9
SRN4012T-100M	10	$\pm 20$	10	30	0.18	1.1	0.8
SRN4012T-150M	15	$\pm 20$	10	24	0.26	0.75	0.65
SRN4012T-220M	22	$\pm 20$	10	18	0.4	0.62	0.5

**Soldering Profile**



**Electrical Schematic**



**How to Order**

**SRN4012T - R47M**

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

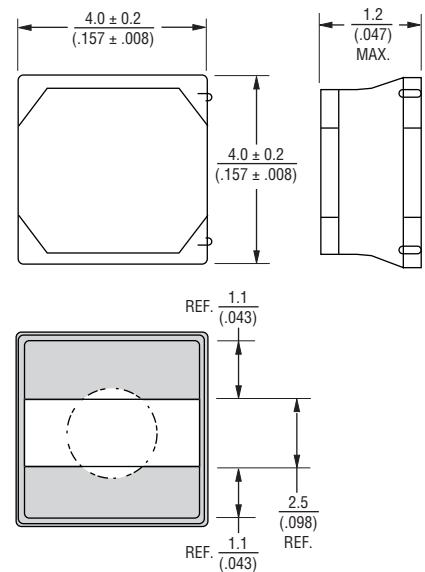
**General Specifications**

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

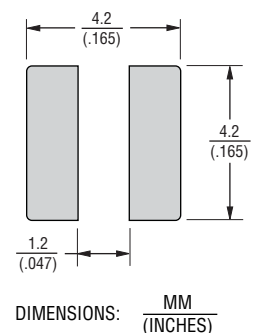
**Materials**

Core ..... Ferrite  
Wire ..... Enameled copper  
Terminal Finish ..... Sn  
Coating ..... Magnetic epoxy resin  
Packaging ..... 4500 pcs. per 13-inch reel

**Product Dimensions**



**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.

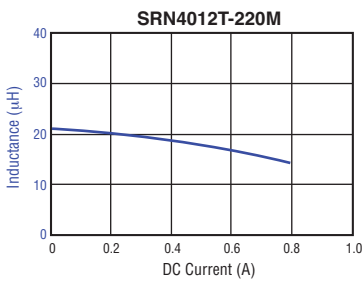
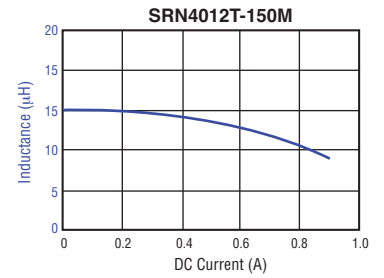
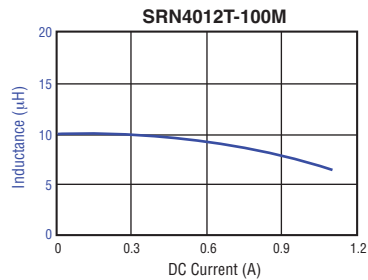
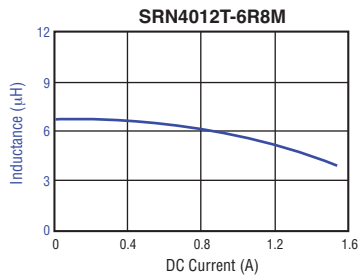
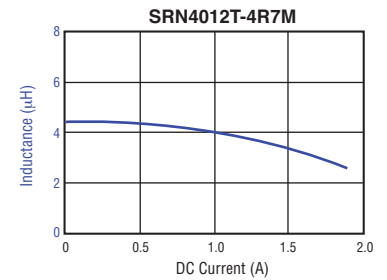
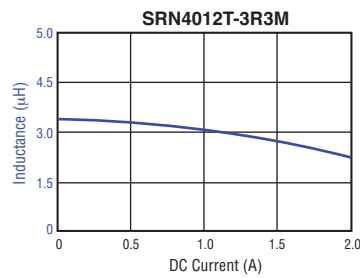
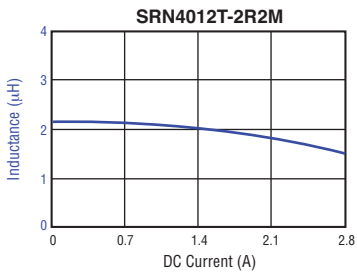
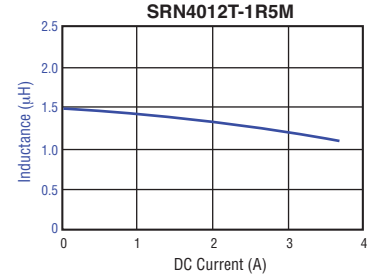
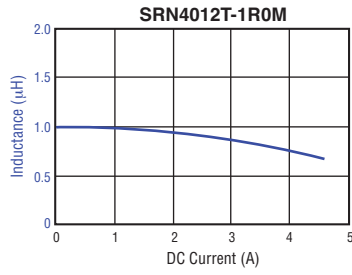
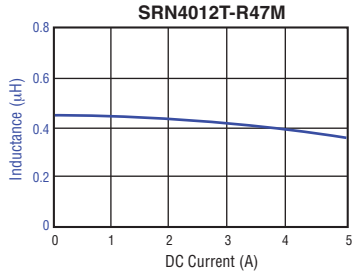
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

# SRN4012T Series - Semi-shielded Power Inductors

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## L vs. IDC

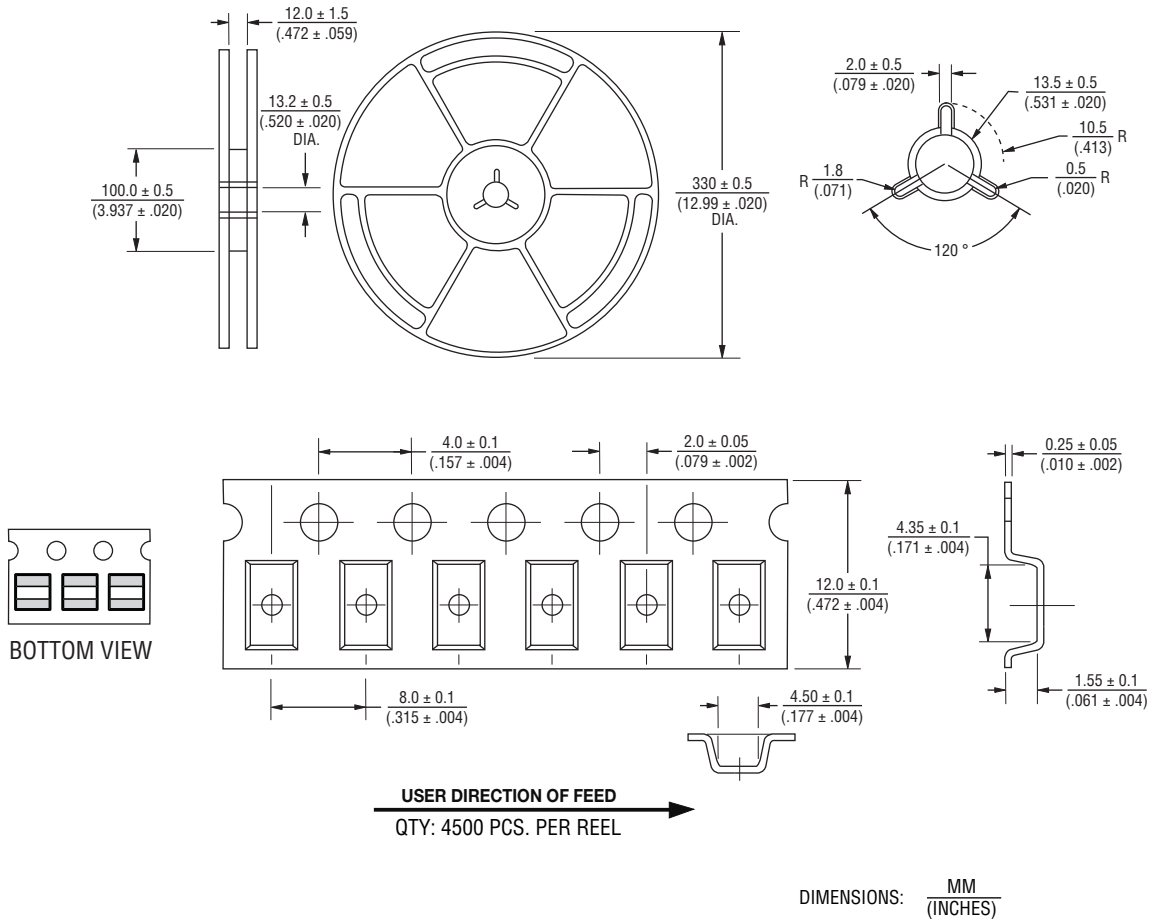


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# SRN4012T Series - Semi-shielded Power Inductors

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## Packaging Specifications



**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. 05/15

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