

Features

- Semi-shielded construction
- Miniature size
- Low profile: 1.2 mm
- Inductance range: 0.24 to 2.2 µH
- Rated current up to 4.7 A
- RoHS compliant* and halogen free**

Applications

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

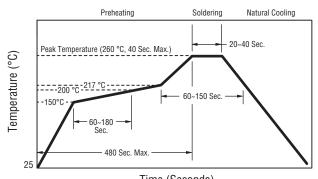
SRN2512 Series - Semi-shielded Power Inductors

Electrical Specifications @ 25 °C

	Inductance @ 1 MHz / 0.1 V		Q	Test Frea.	SRF (MHz)	DCR (Ω)	Irms	Isat
Bourns Part No.	L (μH)	Tol. %	(Ref.)	(MHz)	Min.	Max.	(A)	(A)
SRN2512-R24M	0.24	20	7	1	330	0.024	4.7	8.0
SRN2512-R33M	0.33	20	7	1	300	0.032	4.5	5.7
SRN2512-R47M	0.47	20	8	1	190	0.032	4.4	5.5
SRN2512-R68M	0.68	20	9	1	140	0.043	3.6	4.5
SRN2512-1R0M	1.0	20	10	1	120	0.057	3.5	3.9
SRN2512-1R5M	1.5	20	10	1	90	0.096	2.5	3.0
SRN2512-2R2M	2.2	20	11	1	80	0.102	2.3	2.7

Soldering Profile

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



Time (Seconds) Reflow Times: 3 Times Max.

Electrical Schematic

How to Order

SRN2512 - R24M Model Value Code (see table)

BOURNS[®]

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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 (CI) 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.

General Specifications

Operating Temperature

.....-55 °C to +125 °C (Temperature rise included) Storage Temperature -40 °C to +85 °C Resistance to Solder Heat

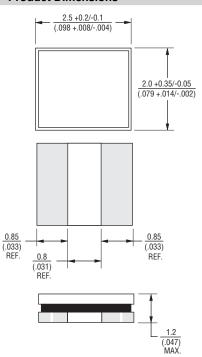
.....+260 °C for 40 sec. Temperature Rise40 °C at rated Irms Rated Current

..... Inductance drops 30 % at Isat

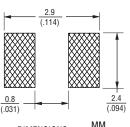
Materials

Core.....Ferrite WireEnameled copper Terminal FinishSn CoatingMagnetic epoxy resin Packaging...... 2000 pcs. per 7-inch reel

Product Dimensions



Recommended Layout



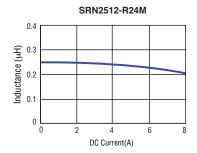
DIMENSIONS:

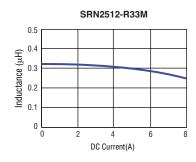
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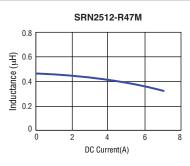
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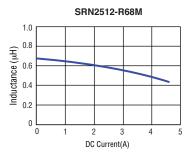
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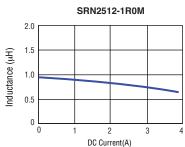
L vs. IDC

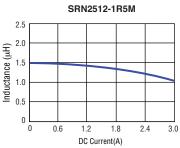


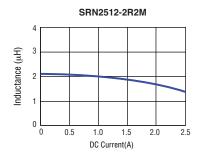




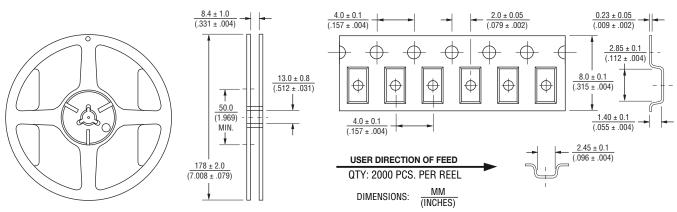








Packaging Specifications



REV. 12/14