



Features

- Semi-shielded construction
- Miniature size
- Low profile, 1 mm
- Flat wire
- Low DCR
- RoHS compliant* and halogen free**

Applications

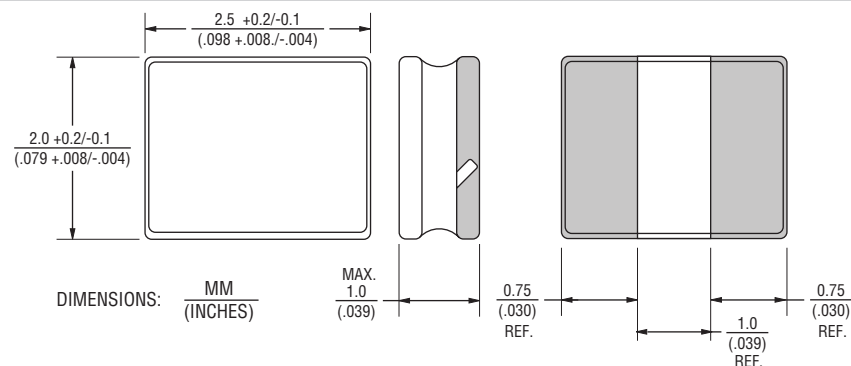
- DC/DC converters
- Notebook computers
- Digital video cameras
- HDDs
- Cell phones
- TV, LCD displays

SRN2510F Series – Semi-Shielded Power Inductors

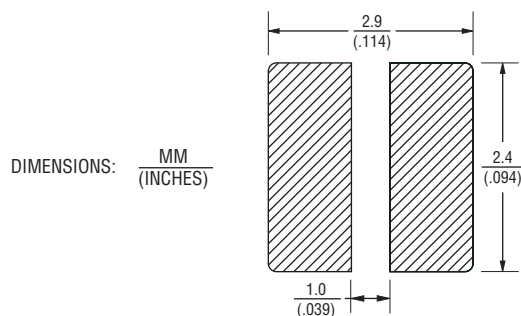
Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 1 MHz / 1 V		SRF (MHz) Ref.	DCR (Ω) Typ.	DCR (Ω) Max.	I rms (A) Typ.	I sat (A) Typ.
	L (μH)	Tol. %					
SRN2510F-R24M	0.24	± 20 %	180	0.018	0.022	5.5	9.5
SRN2510F-R33M	0.33	± 20 %	150	0.023	0.028	5.3	8.0
SRN2510F-R47M	0.47	± 20 %	120	0.027	0.035	4.6	7.0
SRN2510F-R68M	0.68	± 20 %	90	0.032	0.040	4.2	5.5
SRN2510F-1R0M	1.00	± 20 %	60	0.044	0.053	3.5	4.9
SRN2510F-1R5M	1.50	± 20 %	55	0.062	0.074	3.2	3.8
SRN2510F-2R2M	2.20	± 20 %	40	0.078	0.093	2.6	2.8
SRN2510F-3R3M	3.30	± 20 %	30	0.125	0.150	2.0	2.1
SRN2510F-4R7M	4.70	± 20 %	20	0.180	0.216	1.7	1.7

Product Dimensions



Recommended Layout



General Specifications

Operating Temperature
.....-40 °C to +125 °C
(Temperature rise included)
Storage Temperature
.....-40 °C to +125 °C
Rated Current
..... Inductance drops 30 % at Isat
Temperature Rise40 °C at rated Irms
MSL1
ESD Classification (HBM)..... N/A

Materials

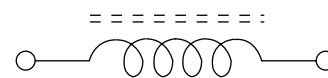
Core.....Metal alloy
Wire.....Enameled copper
Terminal Finish.....Sn
Coating.....Magnetic epoxy resin
Packaging.....2000 pcs. per 7-inch reel

How to Order

SRN2510F - R33M

Model
Value Code (see table)

Schematic



BOURNS®

Asia-Pacific:

Tel: +886-2 2562-4117
Email: asiacus@bourns.com

Europe:

Tel: +36 88 520 390
Email: eurocus@bourns.com

The Americas:

Tel: +1-951 781-5500
Email: americus@bourns.com

www.bourns.com



WARNING Cancer and Reproductive Harm - 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.

Specifications are subject to change without notice.

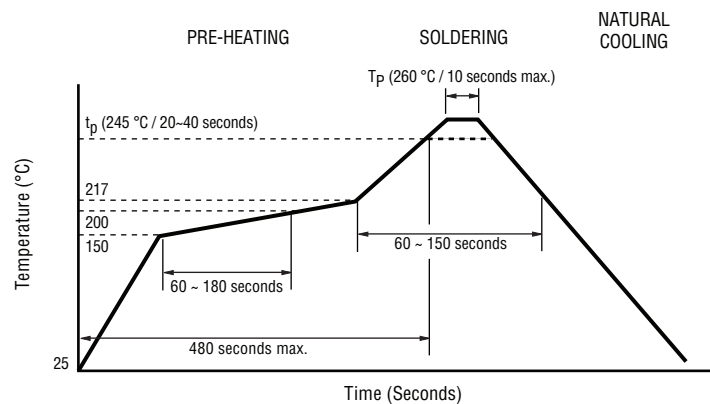
Users should verify actual device performance in their specific applications.

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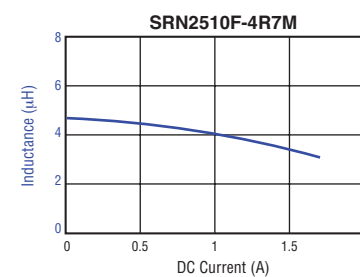
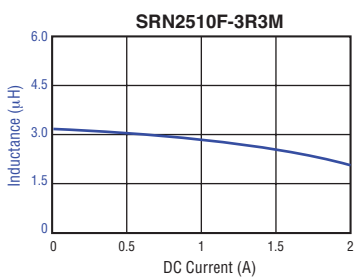
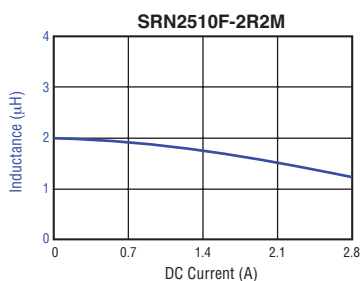
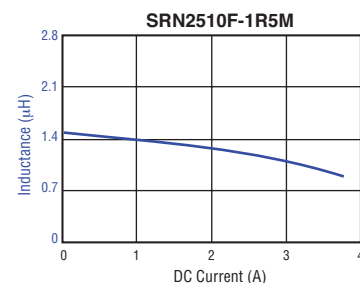
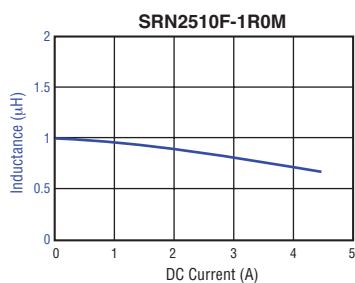
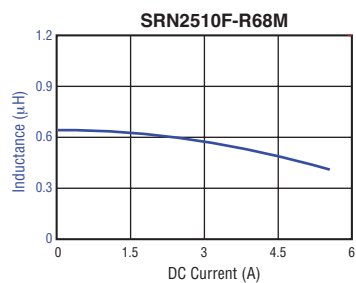
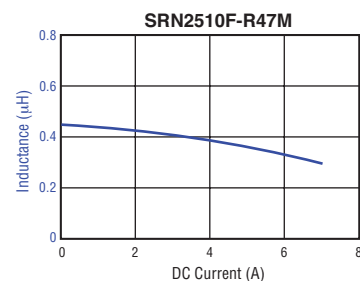
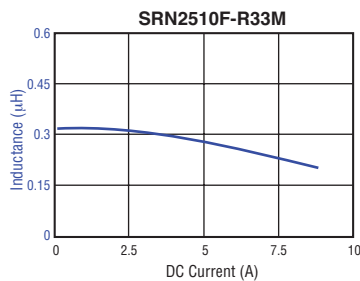
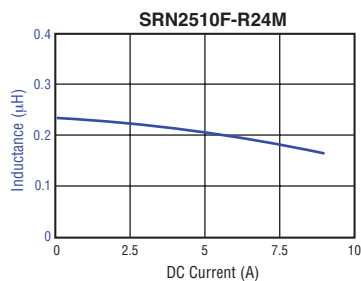
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Soldering Profile



REFLOW TIMES: 3 MAX.

L vs. I Charts



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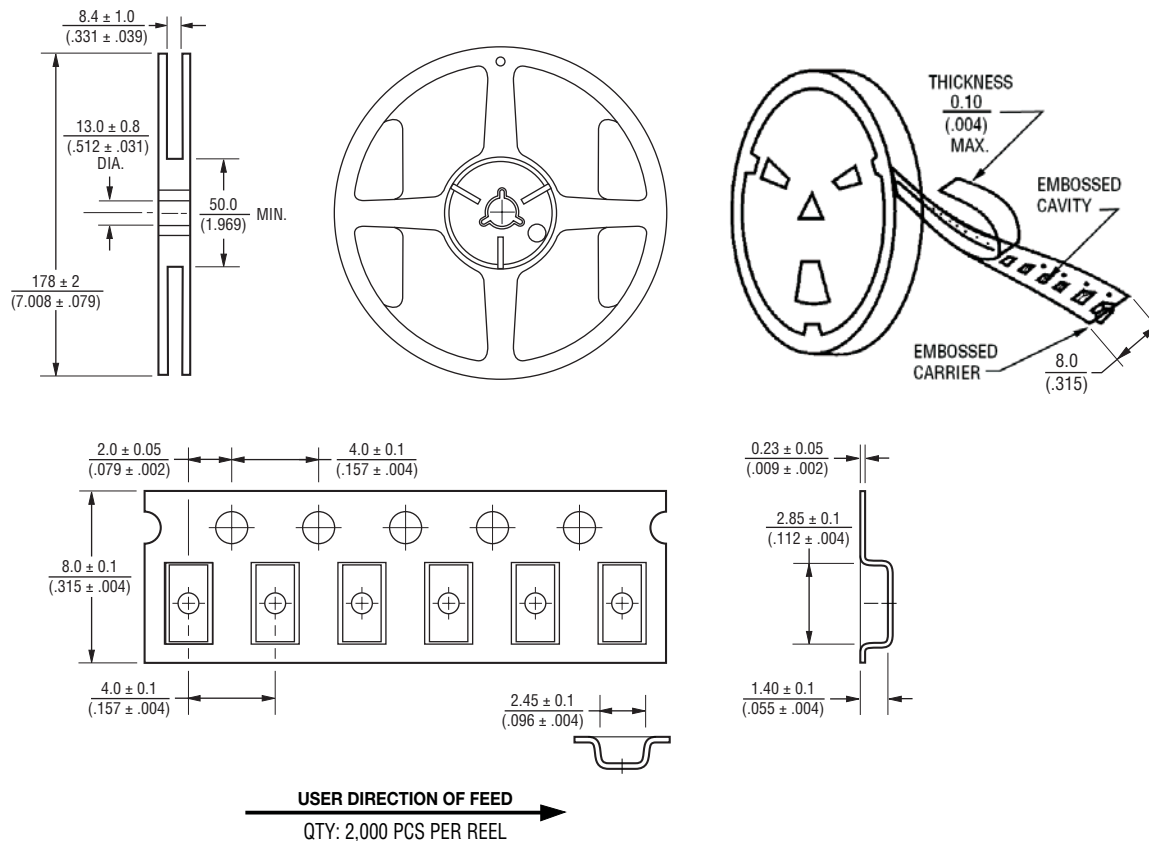
Users should verify actual device performance in their specific applications.

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SRN2510F Series – Semi-Shielded Power Inductors

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Packaging Specifications



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

REV. 12/18

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