

Features

- Wirewound construction
- Iron powder core
- Magnetically shielded construction provides low radiation
- Low DC resistance
- Low profile
- RoHS compliant*

Applications

- DC/DC converters for:
 - Smart phones
 - DVC/DSCs
 - Tablets
 - HDD/SSDs
 - Mobile electronic devices

SRP2512 Series - SMD Power Inductors

Electrical Specifications @ 25 °C

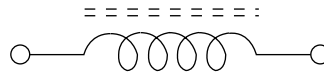
Bourns Part Number	Inductance @ 1 MHz / 1 V		DCR (mΩ) Max.	Irms (A)	Isat (A)
	L (μH)	Tol. (%)			
SRP2512-R47M	0.47	20	25	4.5	5.3
SRP2512-R68M	0.68	20	35	3.7	4.1
SRP2512-1R0M	1	20	49	3.4	3.4
SRP2512-1R5M	1.5	20	77	2.5	3.2
SRP2512-2R2M	2.2	20	104	2.1	3.0

How to Order

Model _____
 Value Code (see table) _____

SRP2512 - 1R0M

Electrical Schematic



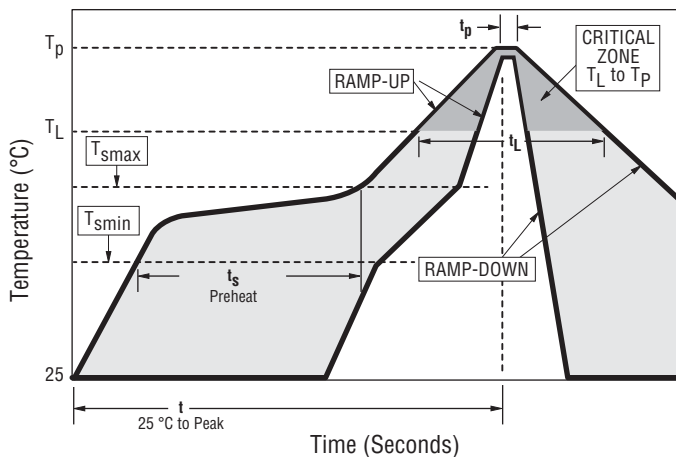
General Specifications

Inductance Test Frequency ... 1 MHz/1 V
 Operating Temperature -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature -50 °C to +125 °C
 Rated Current Inductance drops 30 % at Isat
 Temperature Rise 40 °C at rated Irms
 Resistance to Soldering Heat +260 °C

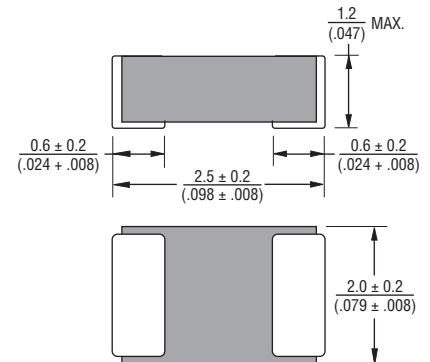
Materials

Core Iron powder
 Terminal Ni/Sn
 Packaging 3000 pcs. per 7-inch reel

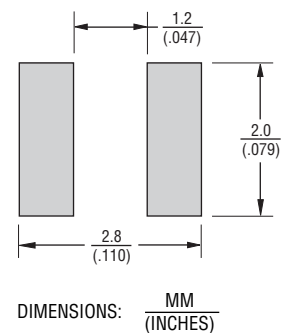
Soldering Profile



Product Dimensions



Recommended Layout



Profile Feature	Pb Free Assembly
Average Ramp Rate (T _{Smax} to T _P)	3 °C/second max.
Preheat <ul style="list-style-type: none"> - Temperature Min. (T_{Smin}) - Temperature Max. (T_{Smax}) - Time (t_{Smin} to t_{Smax}) 	150 °C 200 °C 60-180 seconds
Time Maintained Above <ul style="list-style-type: none"> - Temperature (T_L) - Time (t_L) 	217 °C 60-150 seconds
Peak Temperature (T _P)	260 °C +0/-5 °C
Time within 5 °C of Actual Peak Temperature (T _P)	20-40 seconds
Ramp-Down Rate	6 °C/second max.
Time 25 °C to Peak Temperature	8 minutes max.



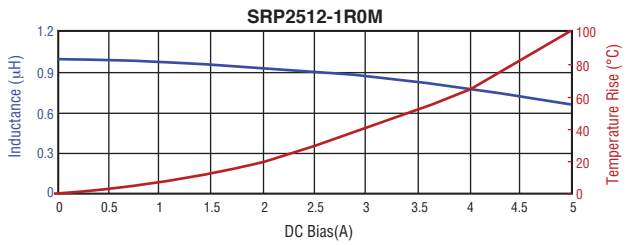
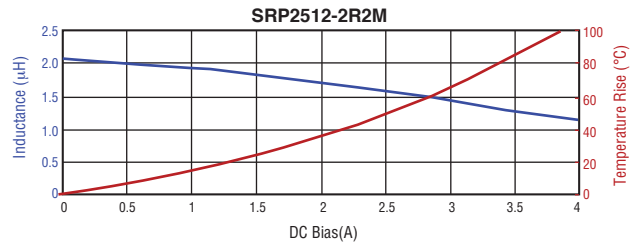
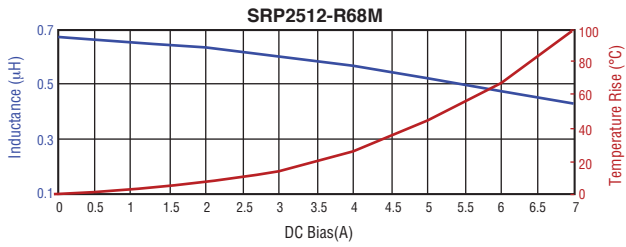
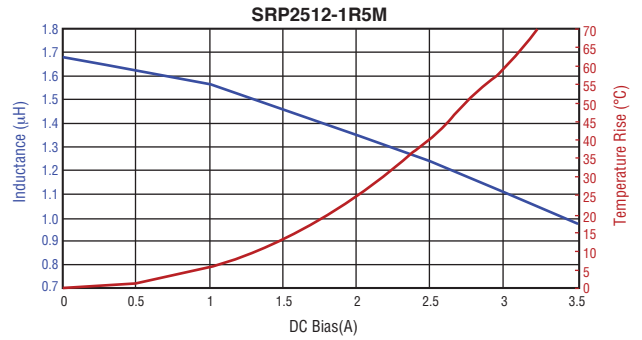
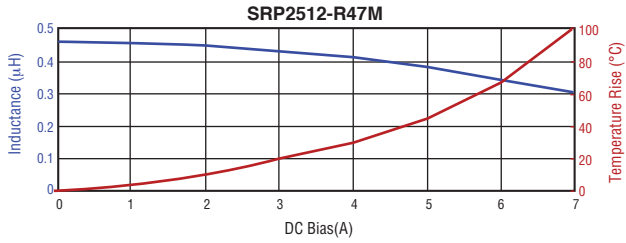
WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

SRP2512 Series - SMD Power Inductors



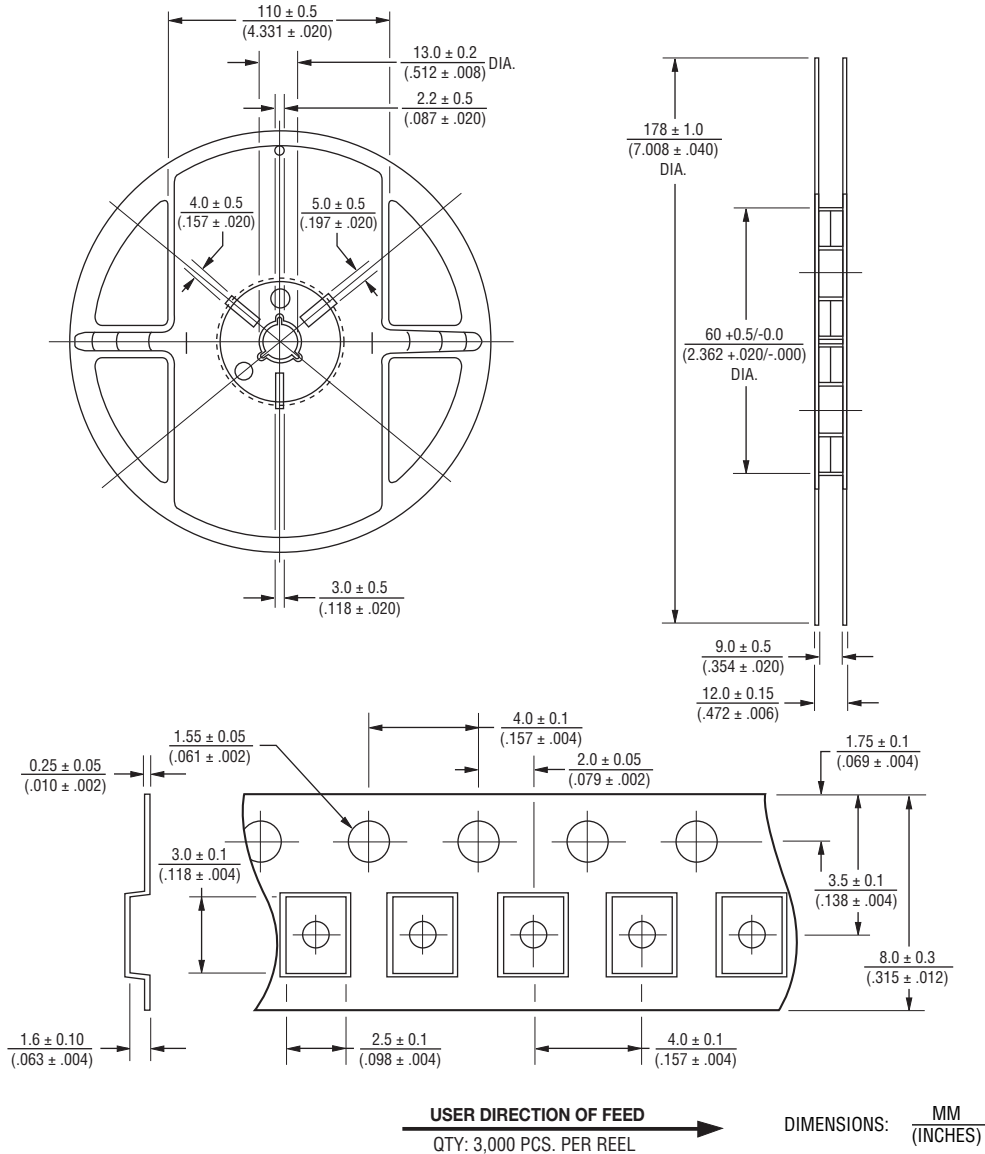
L vs. I Charts



SRP2512 Series - SMD Power Inductors

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Packaging Specifications



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