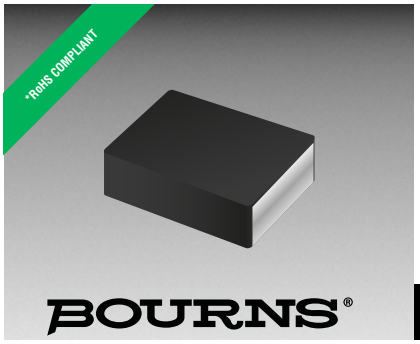


BOURNS®

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

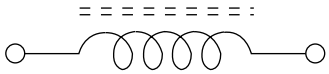
How to Order

SRP2512 - 1R0M

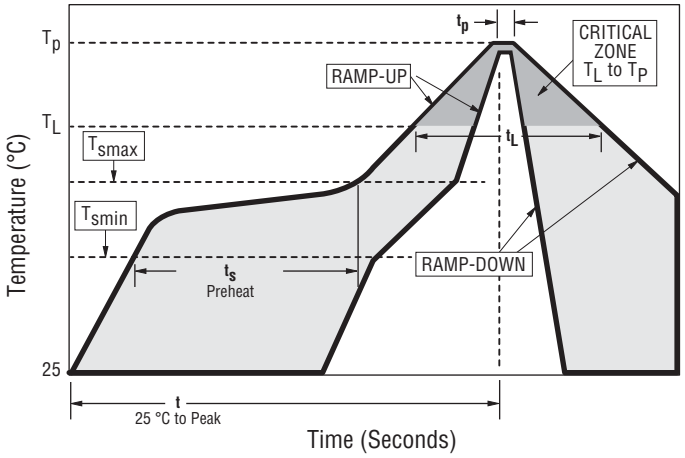
Model

Value Code (see table)

Electrical Schematic



Soldering Profile



Profile Feature	Pb Free Assembly
Average Ramp Rate (T_{Smax} to T_P)	3 °C/second max.
Preheat - Temperature Min. (T_{Smin}) - Temperature Max. (T_{Smax}) - Time (t_{smin} to t_{smax})	 150 °C 200 °C 60-180 seconds
Time Maintained Above - 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.

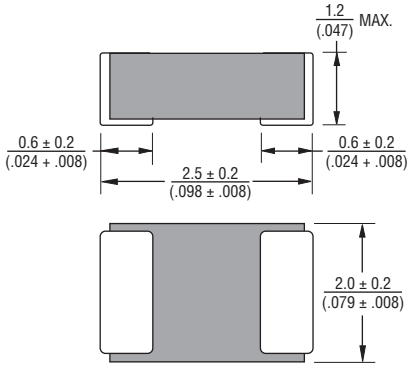
General Specifications

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

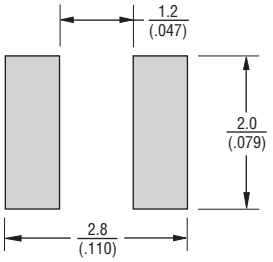
Materials

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

Product Dimensions



Recommended Layout



DIMENSIONS: MM (INCHES)

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.
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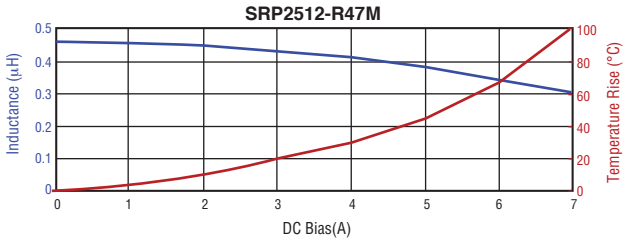
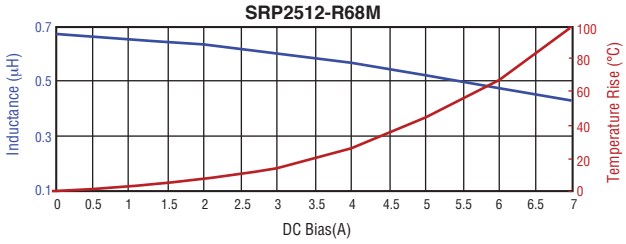
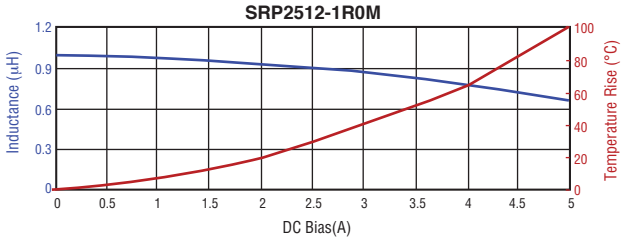
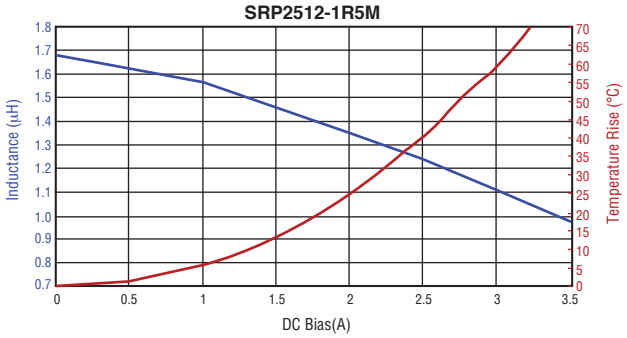
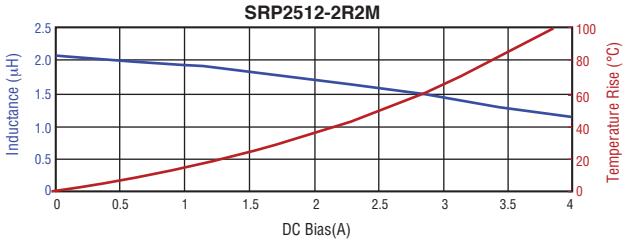
L vs. I Charts



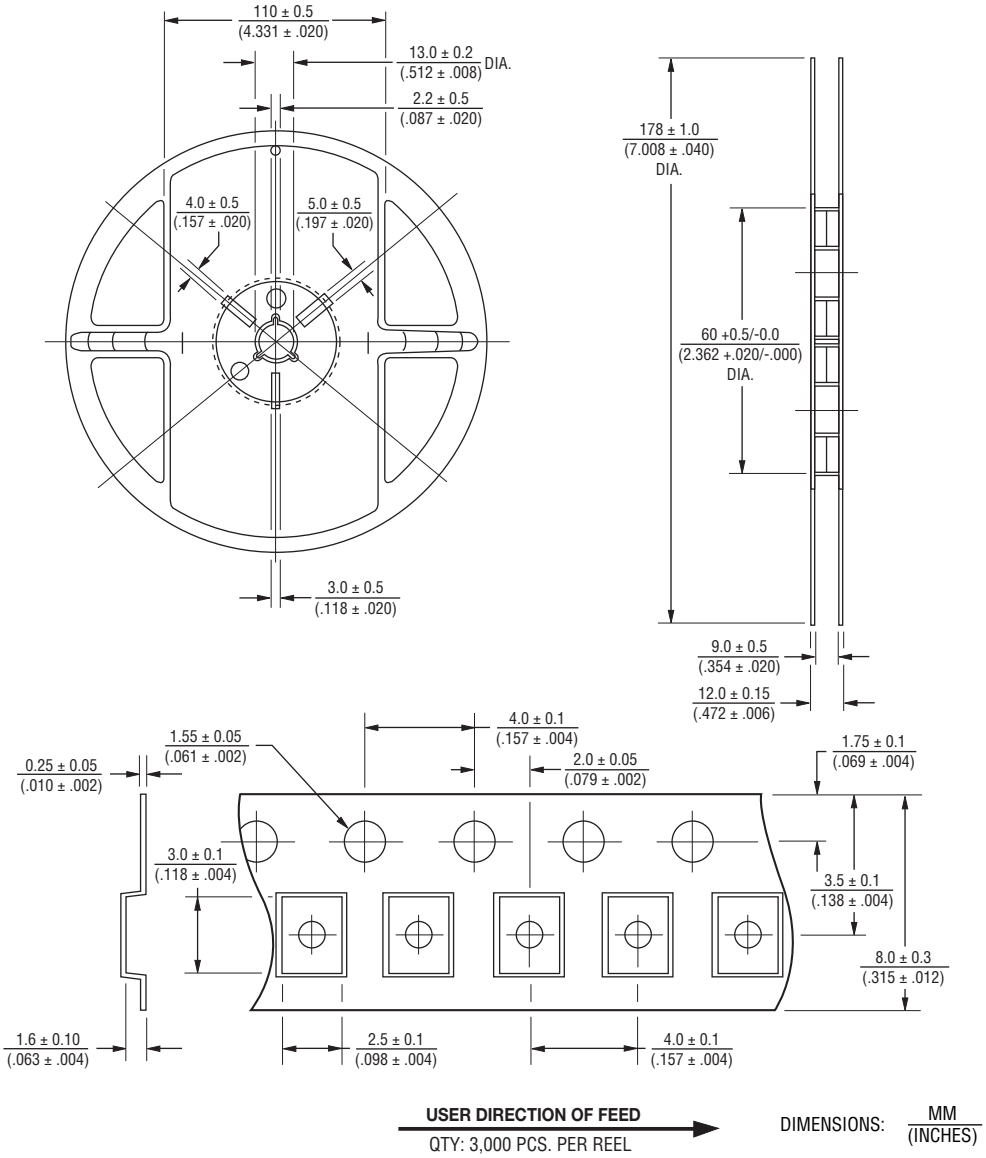








Packaging Specifications



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REV. 02/15

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