

RoHS COMPLIANT

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

BOURNS®

SRP2512 Series - SMD Power Inductors

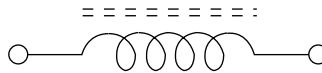
Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 1 MHz / 1 V		DCR (mΩ) Max.	I _{rms} (A)	I _{sat} (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 _____ SRP2512 - 1R0M
 Value Code (see table) _____

Electrical Schematic



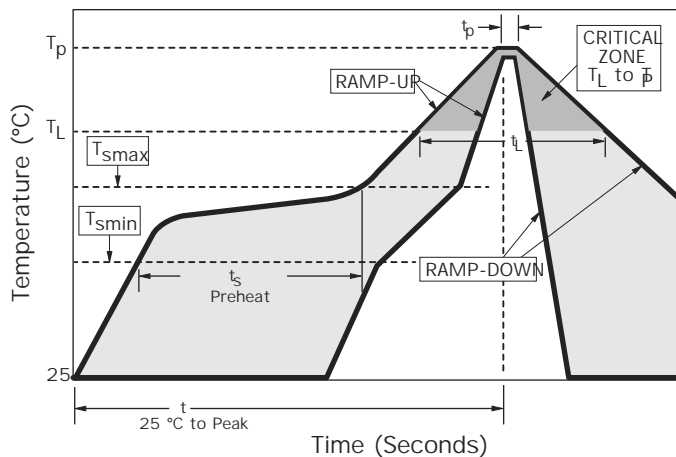
General Specifications

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 I_{sat}
 Temperature Rise40 °C at rated I_{rms}
 Resistance to Soldering Heat.....+260 °C

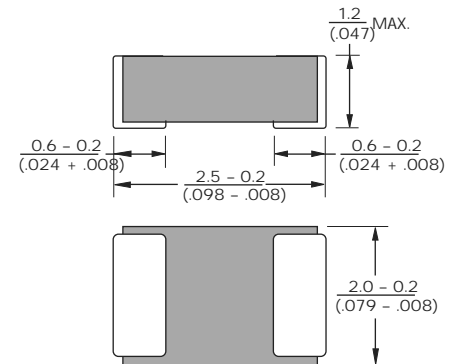
Materials

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

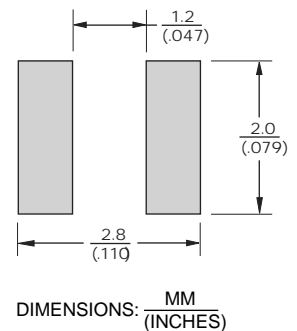
Soldering Profile



Product Dimensions



Recommended Layout



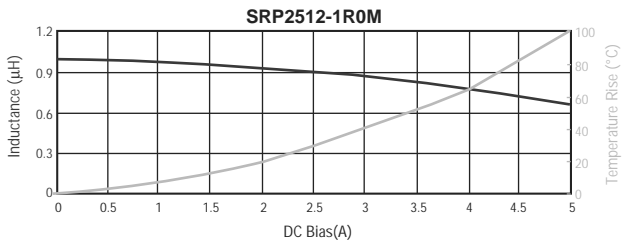
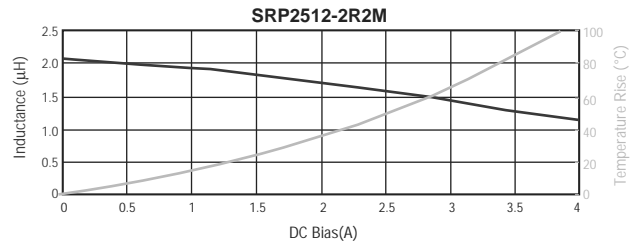
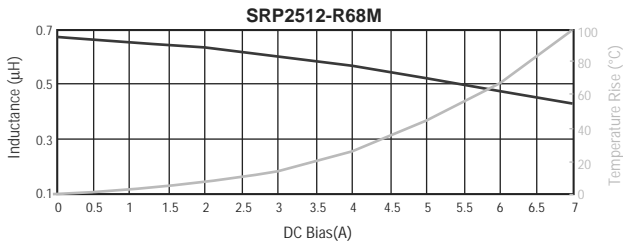
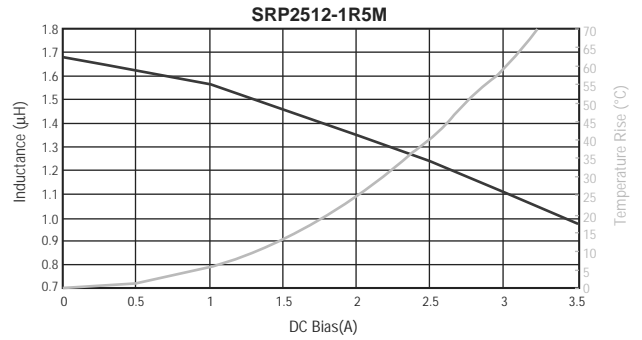
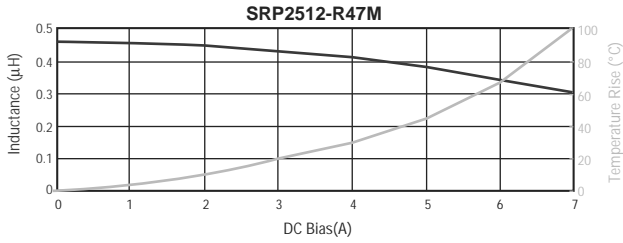
Profile Feature	Pb Free Assembly
Average Ramp Rate (T _{Smax} to T _p)	3 °C/second max.
Preheat <ul style="list-style-type: none"> - Temperature Min. (T_{Smin}) - Temperature Max. (T_{Smax}) - Time (t_{Smin} to t_{Smax}) 	150 °C 200 °C 60-180 seconds
Time Maintained Above <ul style="list-style-type: 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.

* 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.

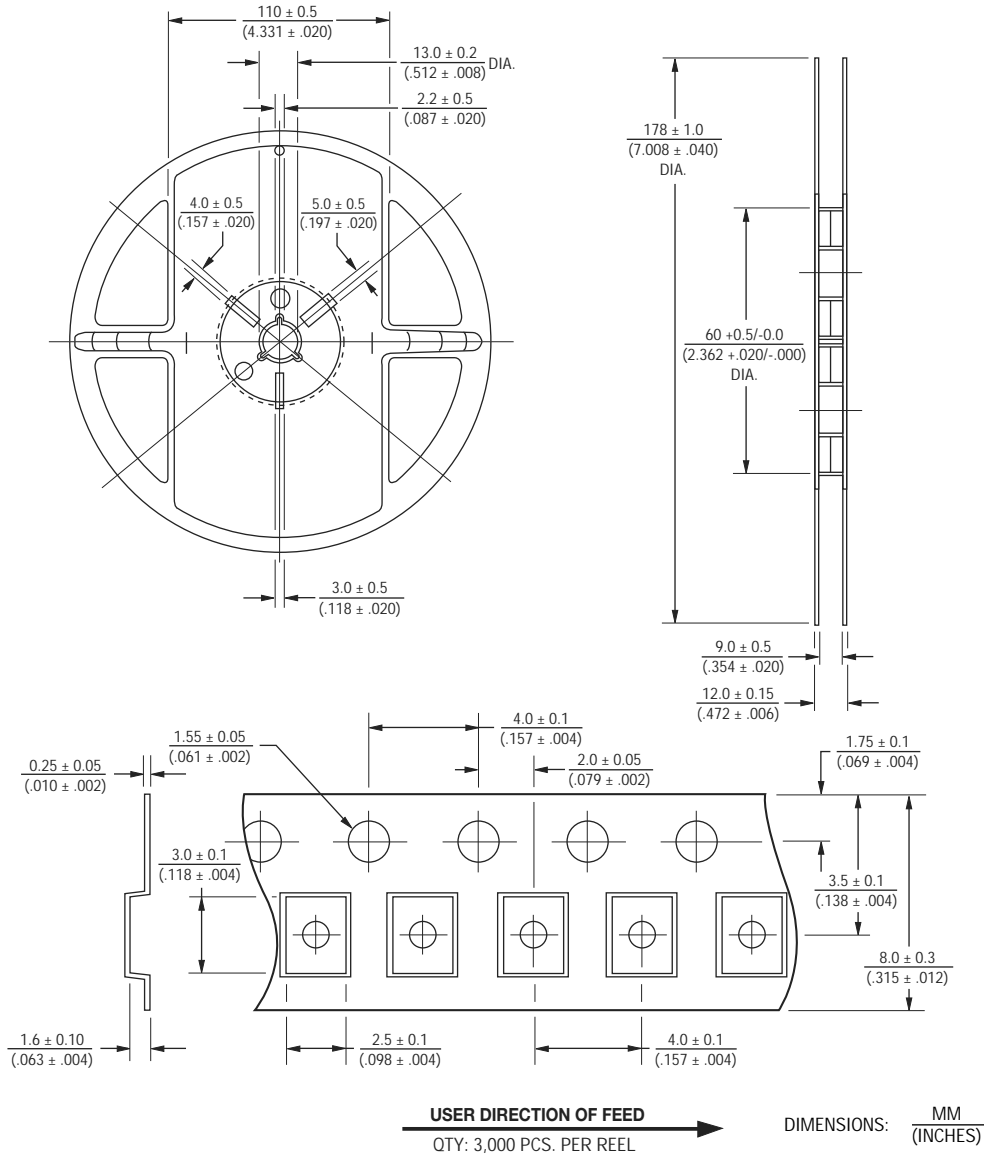
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

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L vs. I Charts



Packaging Specifications



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