Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

Features

- Wirewound
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low profile
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

Applications

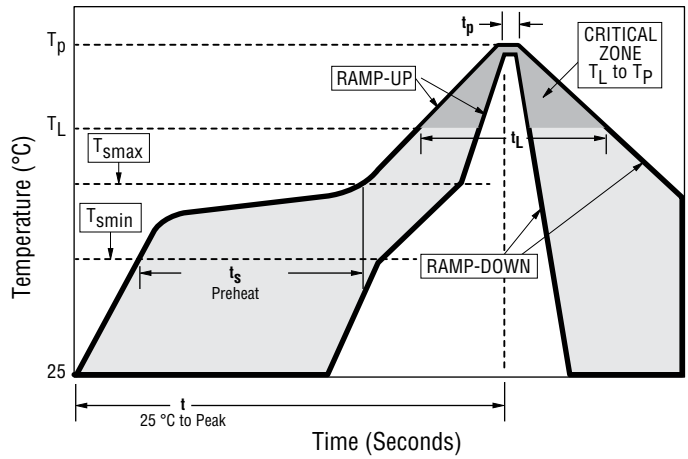
- Automotive systems:
  - Driver assistant
  - Lighting
  - Infotainment
- DC/DC converters
- Power supplies
- Smartphones
- HDD/SSD
- Miniature mobile electronic devices

SRP2512A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 1 MHz / 1 V		Q (Typ.) @1 MHz / 1 V	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	Irms (A) Typ.	Isat (A) Typ.
	L (μH)	Tol. (%)						
SRP2512A-R47M	0.47	±20	39	129	21	25	4.6	5.3
SRP2512A-R68M	0.68	±20	39	104	29	35	3.7	5.0
SRP2512A-1R0M	1.0	±20	39	82	41	49	3.5	4.4
SRP2512A-1R5M	1.5	±20	39	71	64	77	2.5	3.2
SRP2512A-2R2M	2.2	±20	39	62	85	98	2.27	3.0
SRP2512A-4R7M	4.7	±20	39	37	196	235	1.55	1.9

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.

* 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.
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.

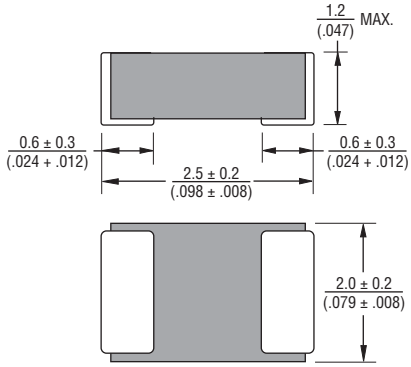
General Specifications

Operating Temperature...-40 °C to +125 °C
(Temperature rise included)
Storage Temperature (Component)
.....-50 °C to +125 °C
Rated Current
..... Inductance drops 30 % at Isat
Temperature Rise .....40 °C at rated Irms
Moisture Sensitivity Level (MSL) 1
ESD Classification (HBM).....N/A

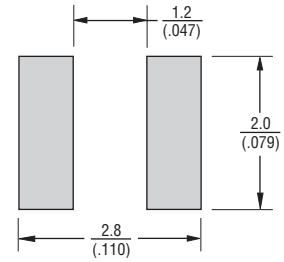
Materials

Core.....Metal alloy powder
Wire .....Enameled copper
Terminal Finish .....Sn
Packaging..... 3000 pcs. per 7-inch reel

Product Dimensions

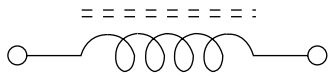


Recommended Layout



DIMENSIONS: MM (INCHES)

Electrical Schematic

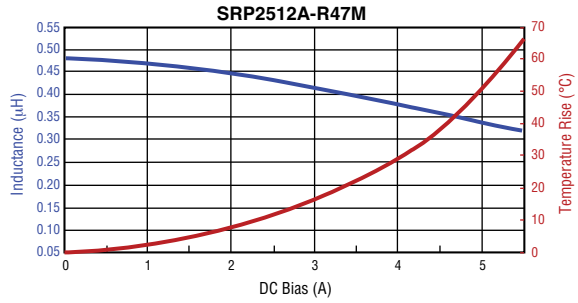


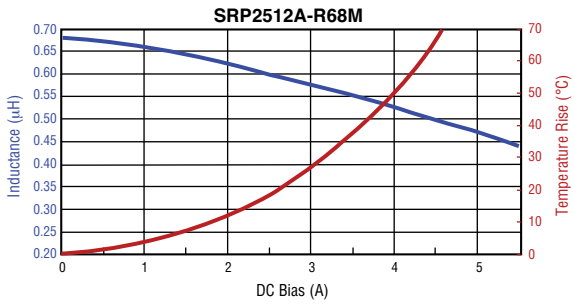
How to Order

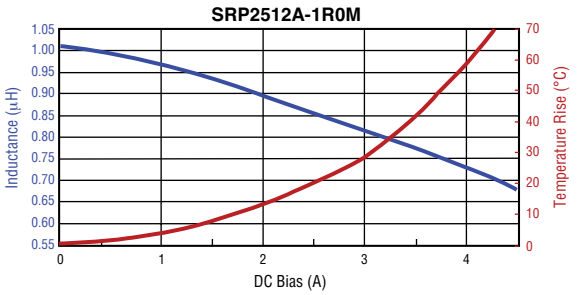
SRP2512A - R47M

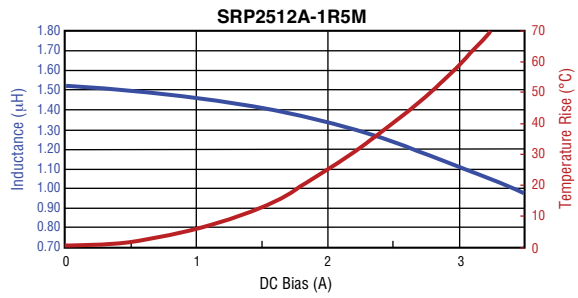
Model
Value Code (see table)

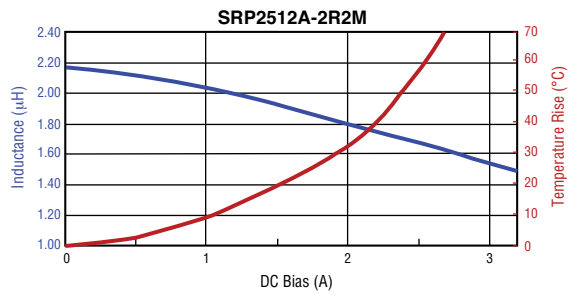
L vs. I Charts

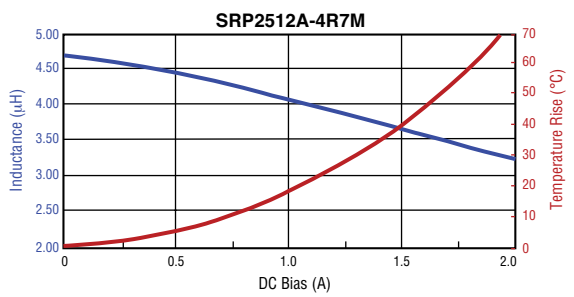












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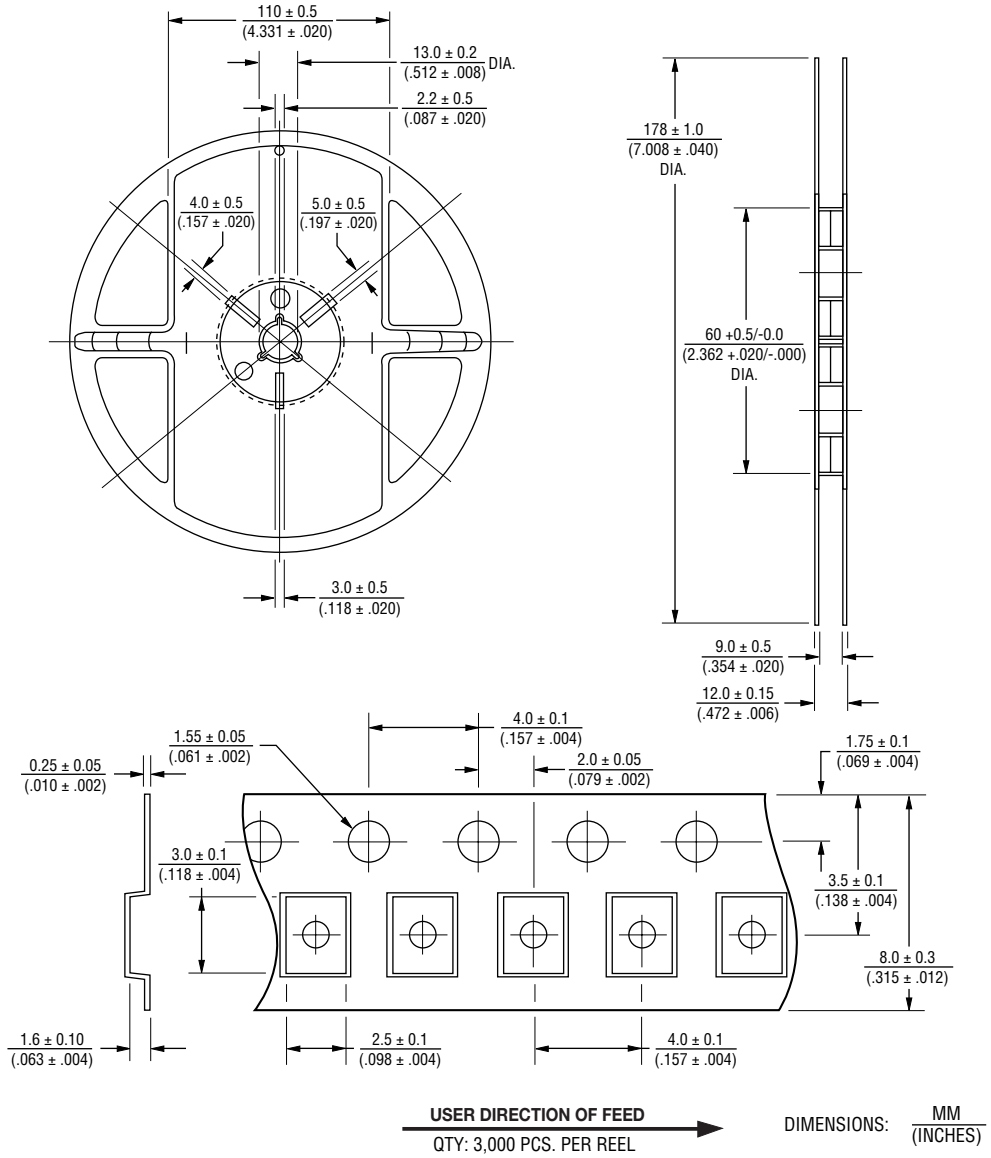
Users should verify actual device performance in their specific applications.

Packaging Specifications



REV. 08/17

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