



## 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

## SRP2010 Series - SMD Power Inductors

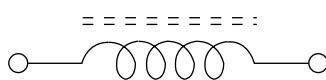
### Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 1 MHz / 1 V		DCR (mΩ) Max.	Irms (A)	Isat (A)
	L (μH)	Tol. (%)			
SRP2010-R24M	0.24	20	21	4.5	5.6
SRP2010-R33M	0.33	20	29	3.8	5.0
SRP2010-R47M	0.47	20	40	3.3	4.4
SRP2010-R68M	0.68	20	49	3.1	3.7
SRP2010-1R0M	1.0	20	69	2.6	2.9
SRP2010-1R5M	1.5	20	137	1.9	2.5
SRP2010-2R2M	2.2	20	150	1.7	1.9

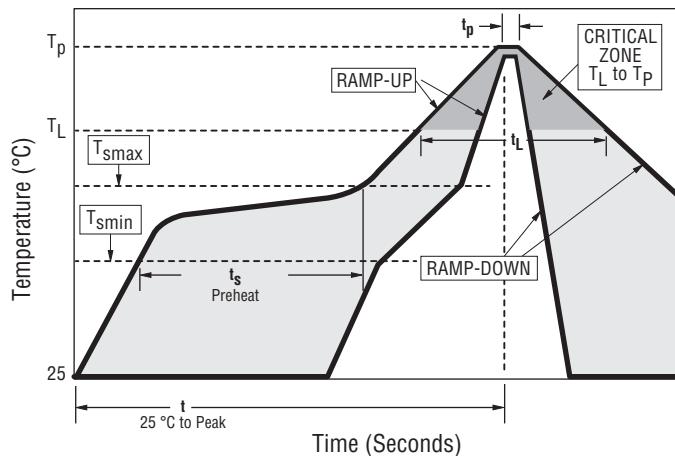
### How to Order

Model: SRP2010 - 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	<ul style="list-style-type: none"> <li>- Temperature Min. (<math>T_{Smin}</math>)</li> <li>- Temperature Max. (<math>T_{Smax}</math>)</li> <li>- Time (<math>t_{Smin}</math> to <math>t_{Smax}</math>)</li> </ul>
Time Maintained Above	<ul style="list-style-type: none"> <li>- Temperature (<math>T_L</math>)</li> <li>- Time (<math>t_L</math>)</li> </ul>
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.

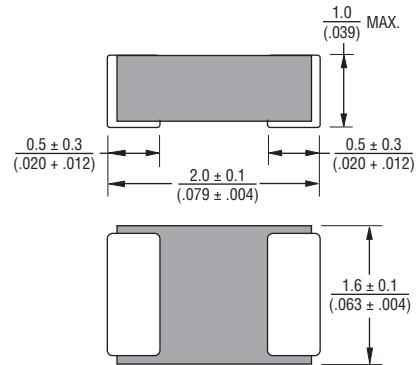
### General Specifications

Inductance Test Frequency/  
 Voltage ..... 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

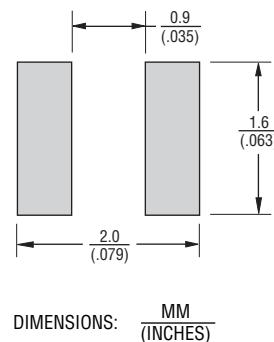
### Materials

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

### Product Dimensions



### Recommended Layout



DIMENSIONS: MM (INCHES)

\* 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.

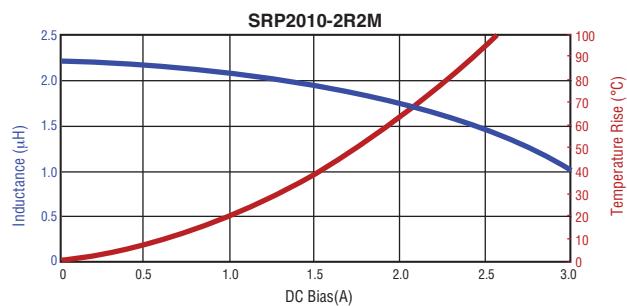
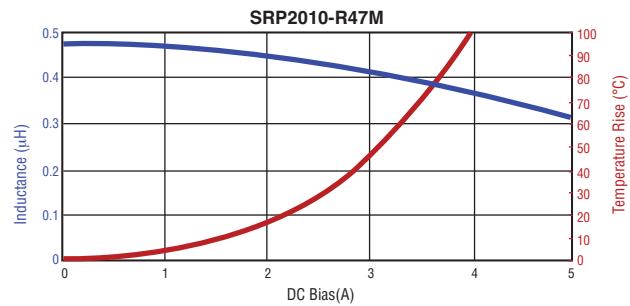
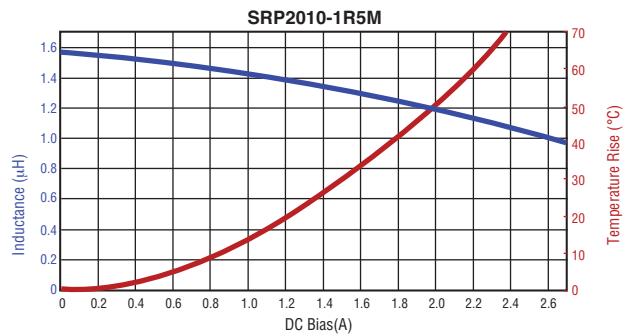
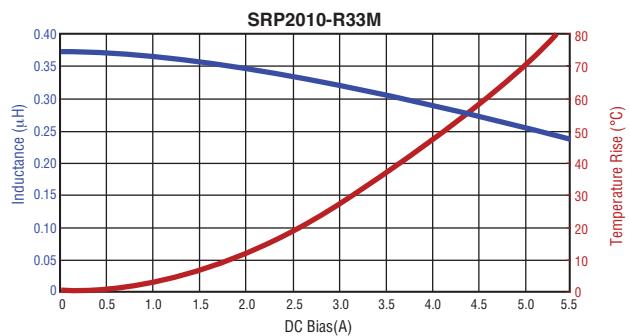
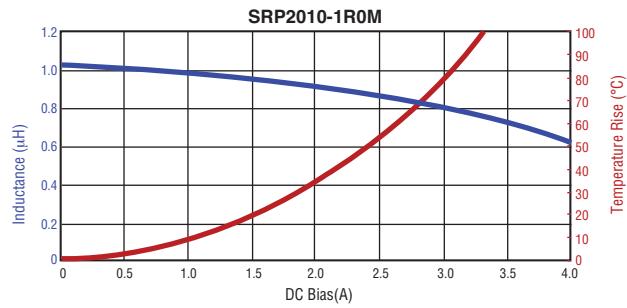
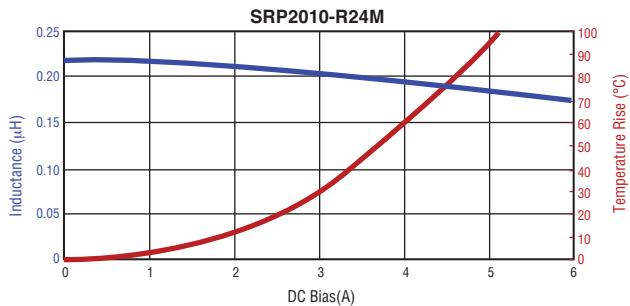
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

## SRP2010 Series - SMD Power Inductors

**BOURNS®**

### L vs. I Charts



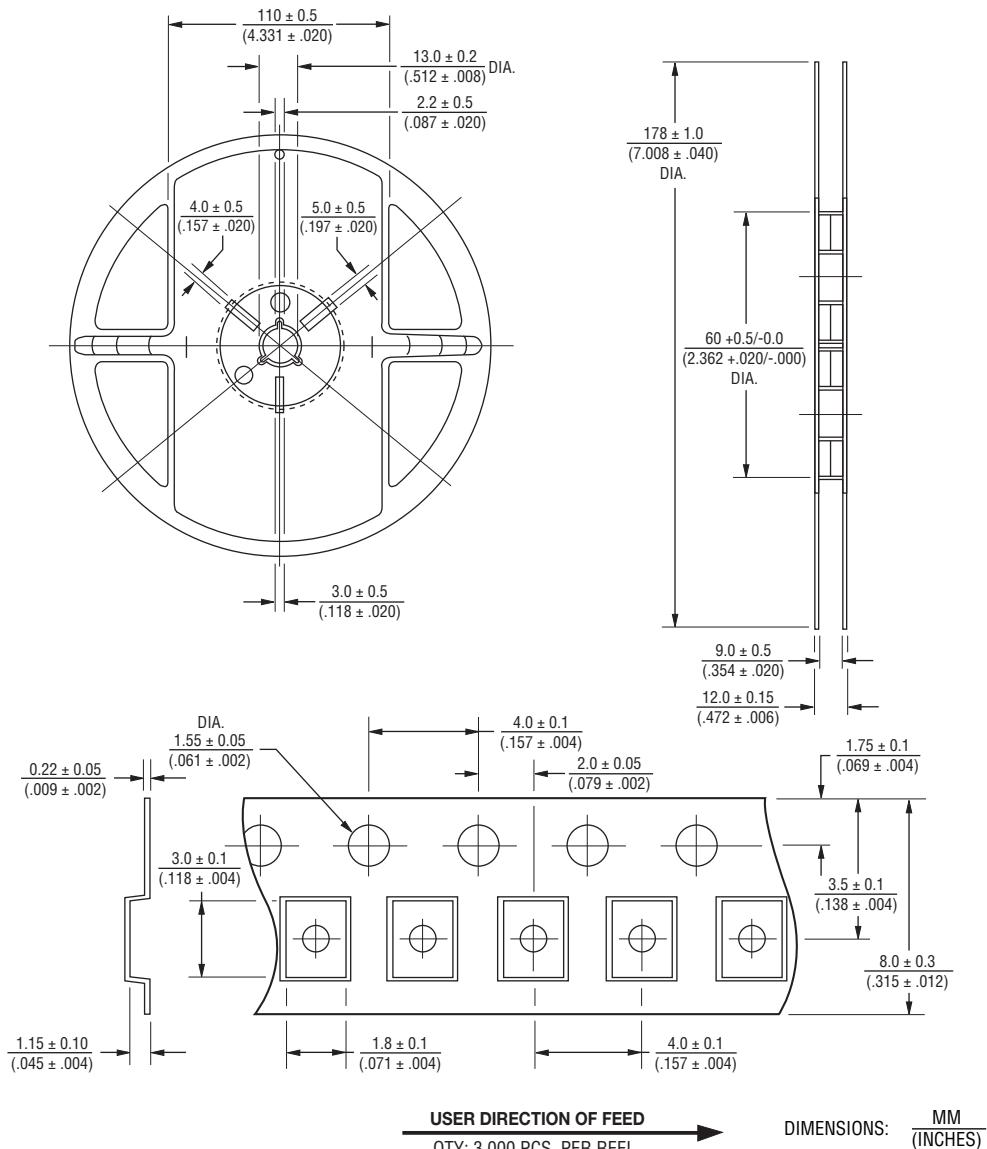
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# SRP2010 Series - SMD Power Inductors

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## Packaging Specifications



**BOURNS®**

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[www.bourns.com](http://www.bourns.com)

REV. 02/15

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# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Bourns:

[SRP2010-R47M](#) [SRP2010-1R0M](#) [SRP2010-R68M](#) [SRP2010-R24M](#) [SRP2010-2R2M](#)