



**THE DATASHEET OF  
SRP1040-R50M**





### Features

- Shielded construction
- Unit height of 4.2 mm
- Inductance range: 0.15 to 15  $\mu$ H
- Current up to 34 A
- RoHS compliant\*

This series is currently available, but not recommended for new designs. The newer [SRP1038A](#) series is recommended.

## SRP1040 Series - Shielded Power Inductors

### Electrical Specifications

Bourns Part No.	Inductance L ( $\mu$ H) $\pm 20$ %	I rms (A)	I sat (A)	DCR (m $\Omega$ ) Max.
SRP1040-R15M	0.15	34	40	1.3
SRP1040-R20M	0.20	32	40	1.0
SRP1040-R36M	0.36	28	40	1.4
SRP1040-R39M	0.39	24	32	1.4
SRP1040-R47M	0.47	26	38	1.6
SRP1040-R50M	0.50	23	32	1.9
SRP1040-R56M	0.56	25	36	1.9
SRP1040-R68M	0.68	23	32	2.4
SRP1040-R75M	0.75	22	28	2.5
SRP1040-R80M	0.80	21	30	3.0
SRP1040-1R0M	1.0	20	28	3.5
SRP1040-1R2M	1.2	18	24	4.7
SRP1040-1R5M	1.5	15	20	7.5
SRP1040-1R7M	1.7	15	18	7.5
SRP1040-2R2M	2.2	12	17	8.6
SRP1040-2R5M	2.5	11.5	14	8.7
SRP1040-3R3M	3.3	10	14	10
SRP1040-3R9M	3.9	9.0	15	12
SRP1040-4R7M	4.7	8.0	13	14
SRP1040-5R6M	5.6	7.0	12	16
SRP1040-6R8M	6.8	6.5	11	24
SRP1040-8R2M	8.2	5.0	8.0	33
SRP1040-100M	10	5.0	9.0	35
SRP1040-150M	15	5.0	7.0	57

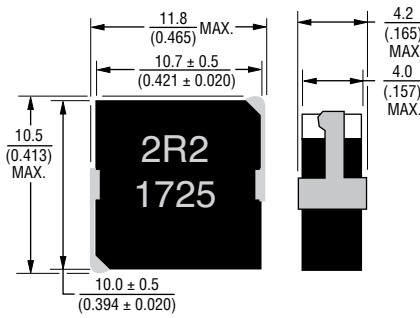
### General Specifications

Test Voltage ..... 1 V  
 Test Frequency ..... 100 KHz  
 Reflow Soldering .. 230 °C; 50 sec. max.  
 Operating Temperature  
 ..... -55 °C to +150 °C  
 (Temperature rise included)  
 Storage Temperature  
 ..... -55 °C to +150 °C  
 Resistance to Soldering Heat  
 ..... +260 °C for 10 sec.

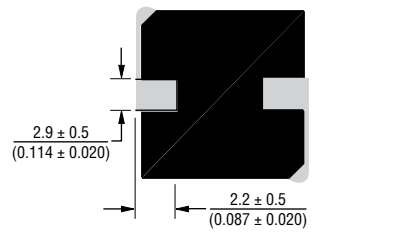
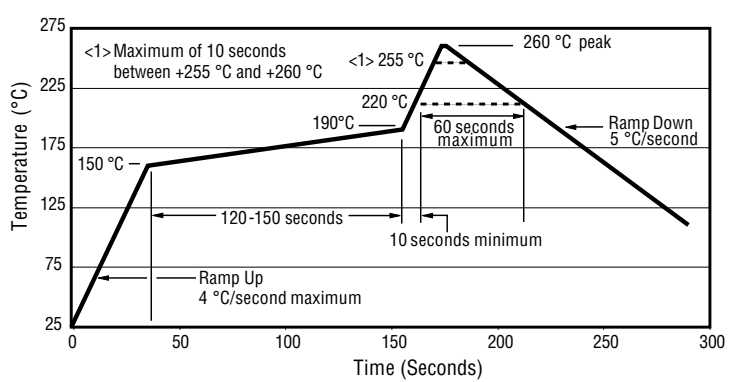
### Materials

Core ..... Iron  
 Wire ..... Enameled copper  
 Terminal ..... Cu/Sn  
 Rated Current ..... Ind. drops 20 % at Isat  
 Temperature Rise ..... 40 °C at rated I rms  
 Packaging ..... 900 pcs. per 13-inch reel

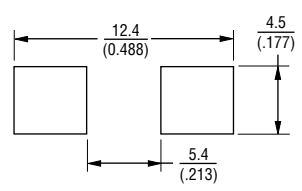
### Product Dimensions



### Soldering Profile

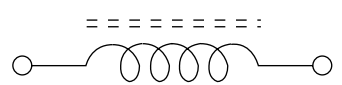


### Recommended Layout



DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

### Electrical Schematic



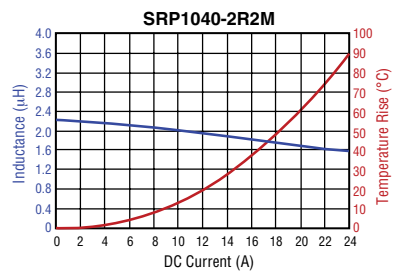
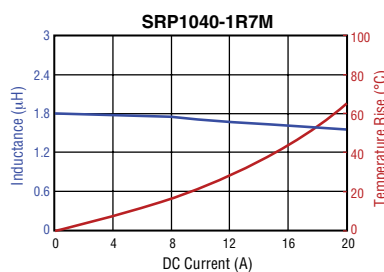
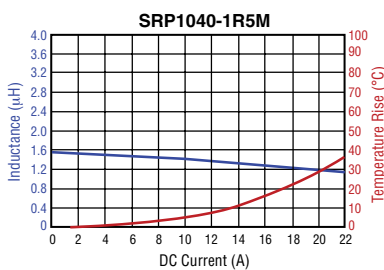
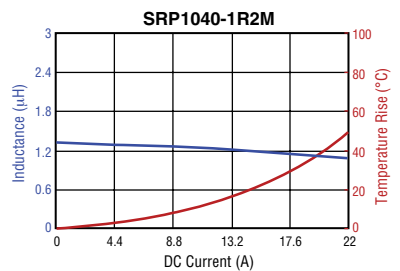
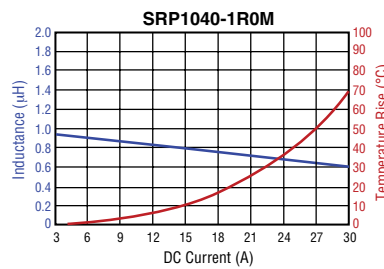
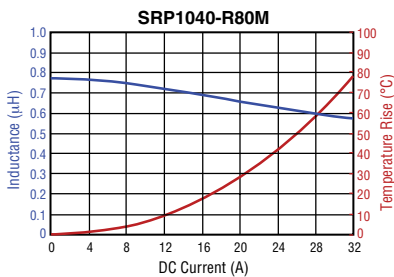
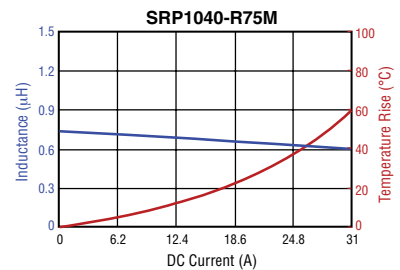
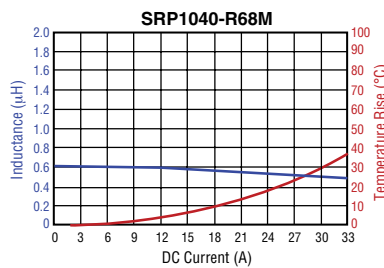
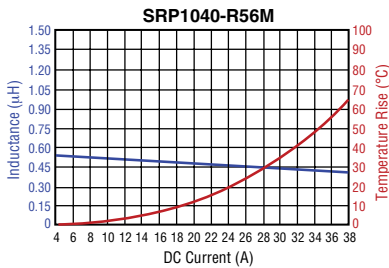
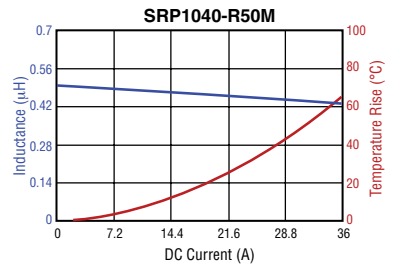
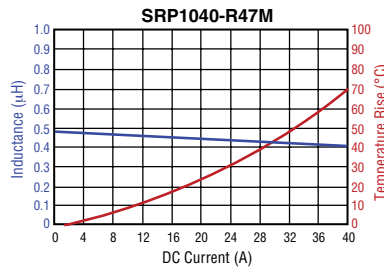
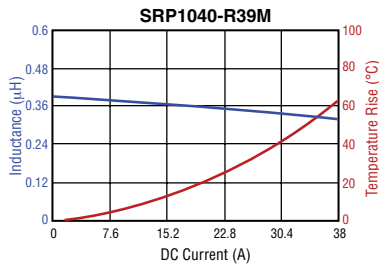
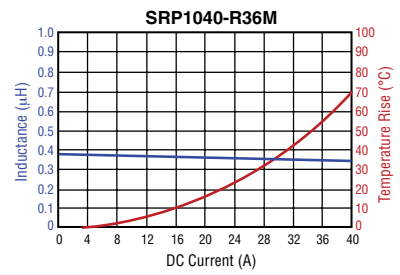
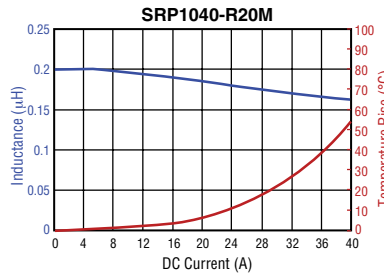
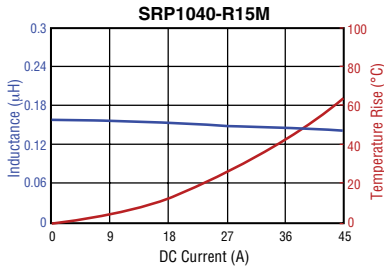
**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.  
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# SRP1040 Series - Shielded Power Inductors

**BOURNS**<sup>®</sup>

## L vs. I Charts



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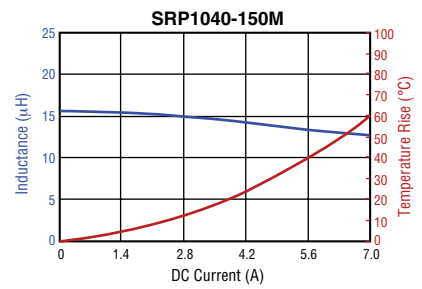
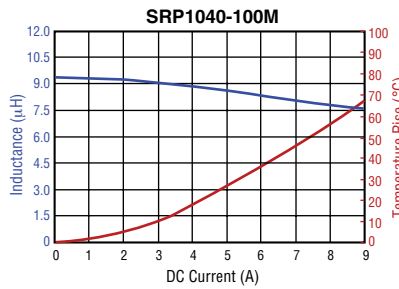
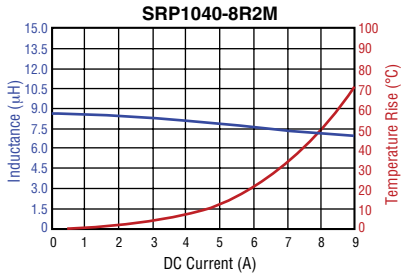
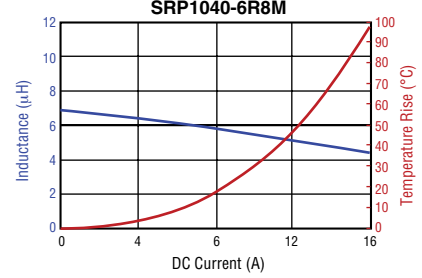
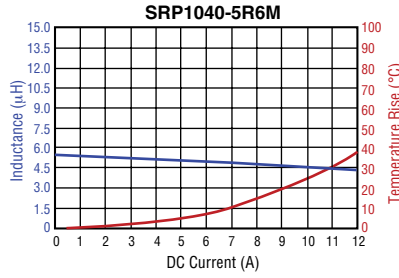
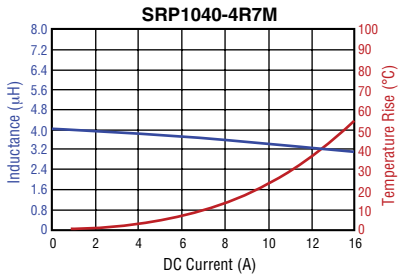
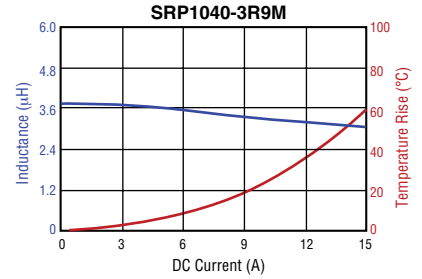
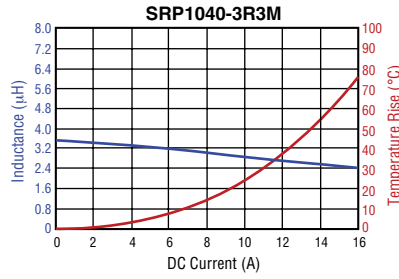
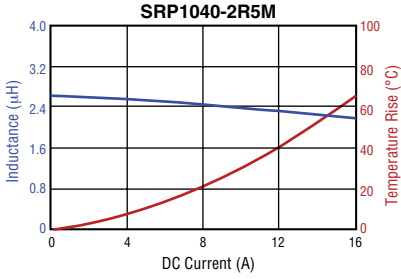
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# SRP1040 Series - Shielded Power Inductors

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## L vs. I Charts



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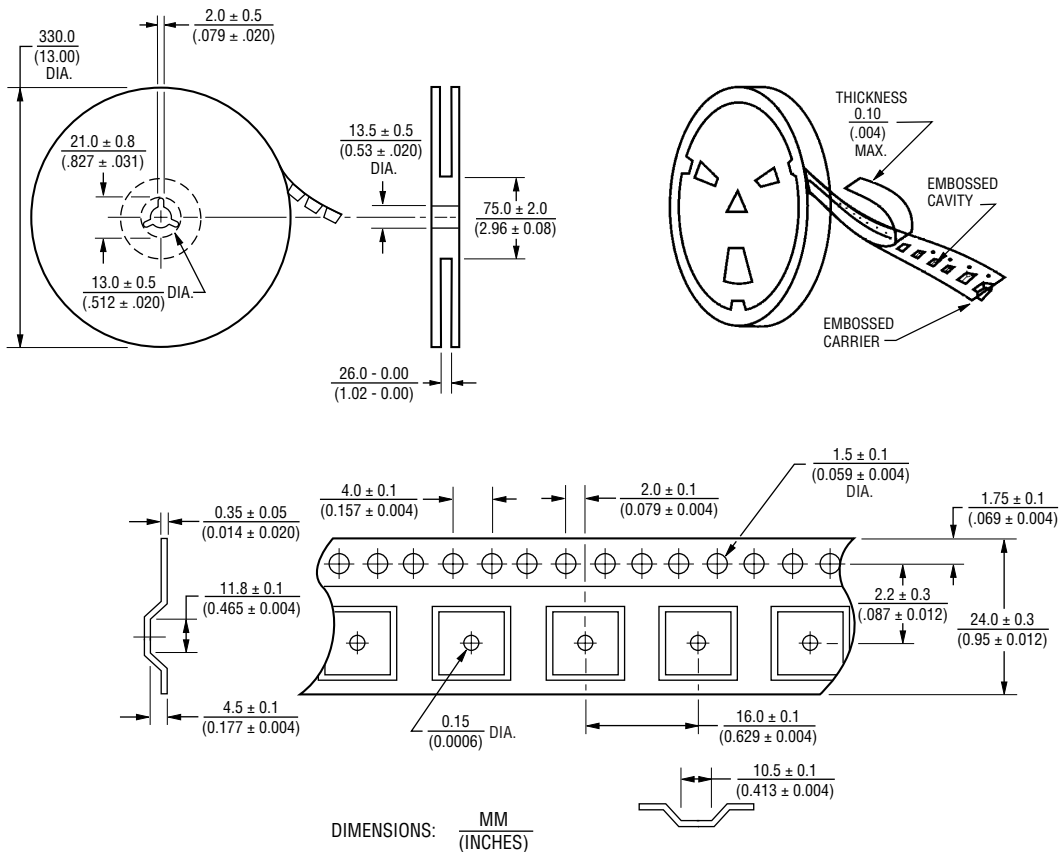
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# SRP1040 Series - Shielded Power Inductors

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## Packaging Specifications



REV. 06/19

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