




**THE DATASHEET OF  
SRP1250-R56M**





### Features

- Shielded construction
- Unit height of 5.9 mm
- Inductance range: 0.22 to 10  $\mu$ H
- Current up to 45 A
- RoHS compliant\*

 This series is currently available, but not recommended for new designs. The newer [SRP1245A](#) series is recommended.

## SRP1250 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.
SRP1250-R22M	0.22	45	80	1.0
SRP1250-R36M	0.36	41	75	1.1
SRP1250-R47M	0.47	38	65	1.3
SRP1250-R50M	0.50	36	55	1.5
SRP1250-R56M	0.56	36	55	1.5
SRP1250-R68M	0.68	34	54	1.7
SRP1250-R82M	0.82	31	53	2.3
SRP1250-1R0M	1.00	29	50	2.5
SRP1250-1R2M	1.20	27	49	3.3
SRP1250-1R5M	1.50	23	48	4.1
SRP1250-1R8M	1.80	21	40	4.7
SRP1250-2R2M	2.20	20	32	5.5
SRP1250-2R7M	2.70	17	32	7.3
SRP1250-3R3M	3.30	15	32	9.2
SRP1250-4R7M	4.70	12	27	15.0
SRP1250-6R0M	6.00	9.5	14	10.0
SRP1250-6R8M	6.80	11	21	18.5
SRP1250-7R8M	7.80	10	18	20.5
SRP1250-9R0M	9.00	10	18	22.5
SRP1250-100M	10.0	9	16	25.5

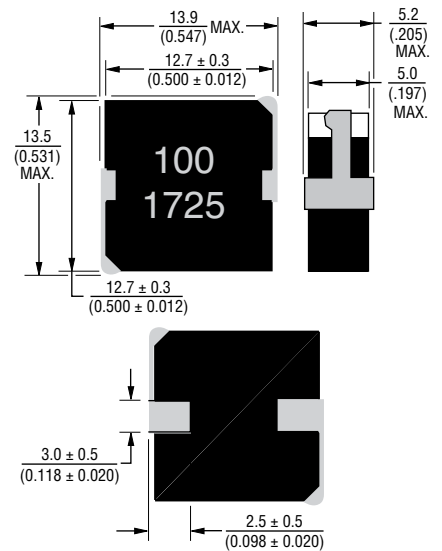
### General Specifications

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.

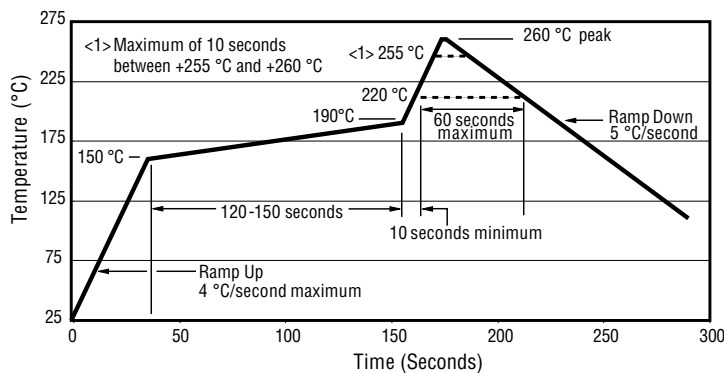
### Materials

Core ..... Iron  
 Wire ..... Enameled copper  
 Terminal ..... Cu/Sn  
 Rated Current ..... Ind. drops 20 % at Isat  
 Temperature Rise ..... 40 °C at rated Irms  
 Packaging ..... 500 pcs. per 13-inch reel

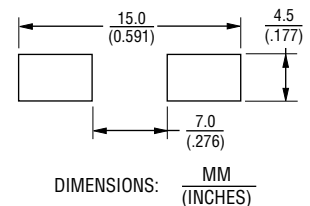
### Product Dimensions



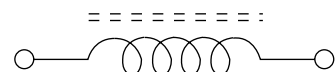
### Soldering Profile



### Recommended Layout



### Electrical Schematic



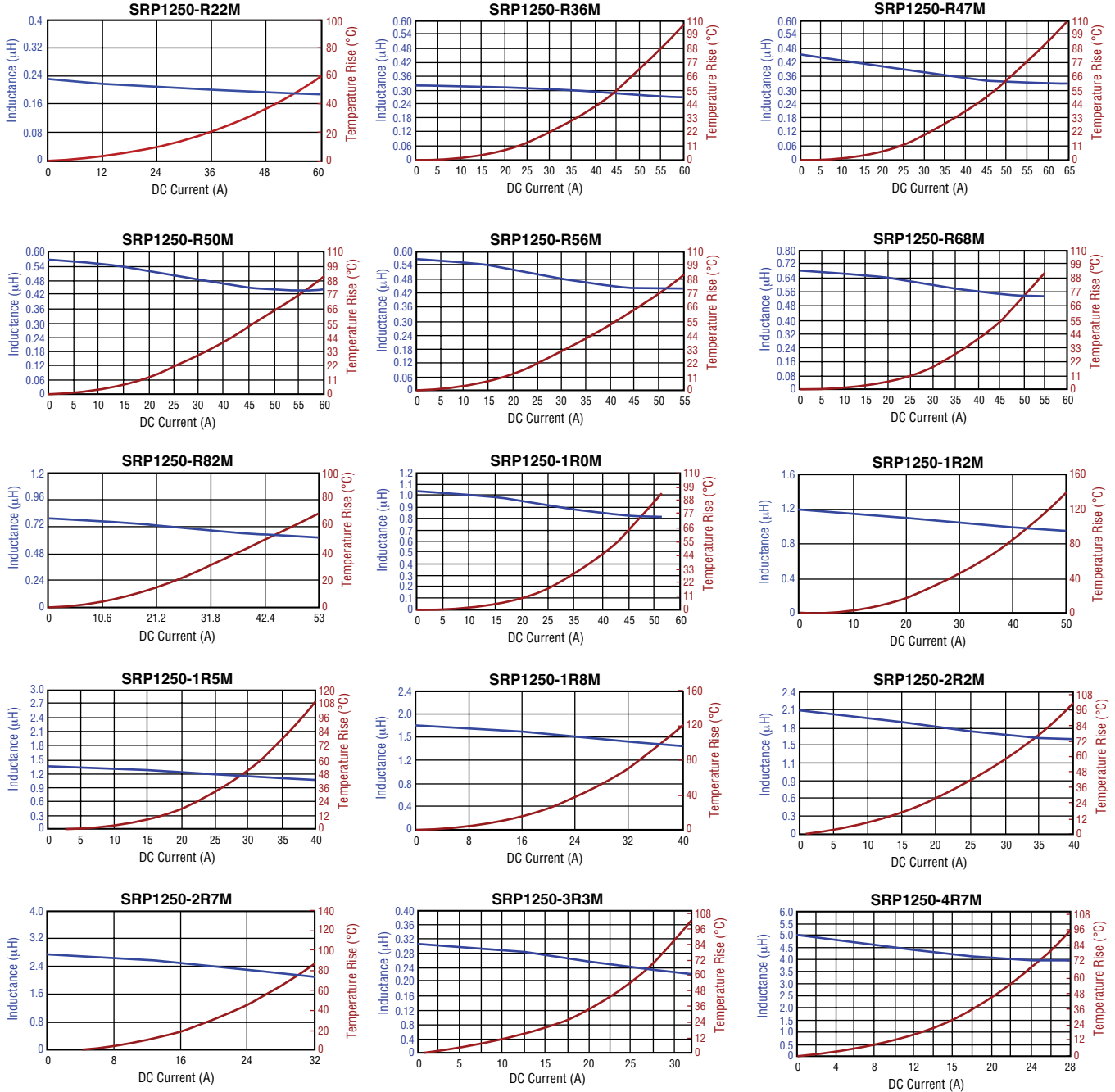
**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.  
 Specifications are subject to change without notice.  
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# SRP1250 Series - Shielded Power Inductors



## L vs. I Charts

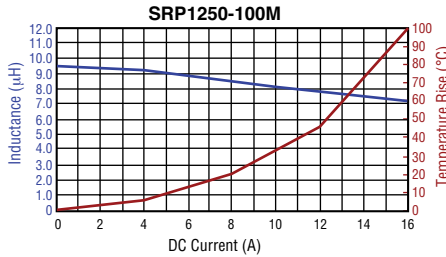
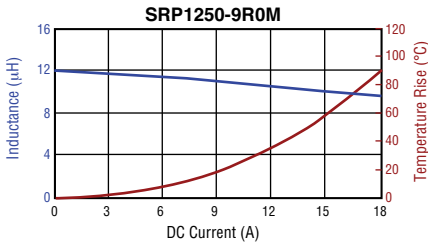
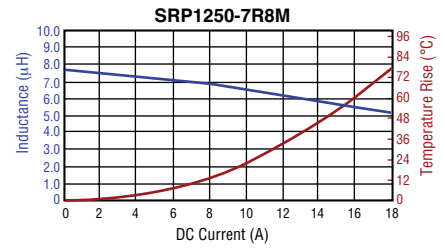
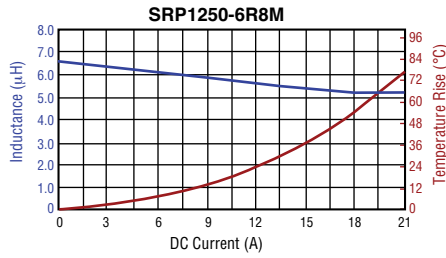
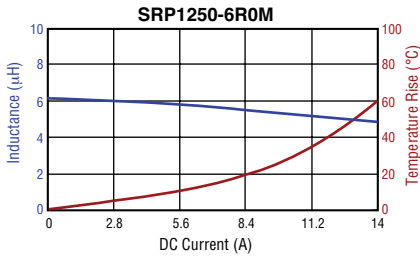


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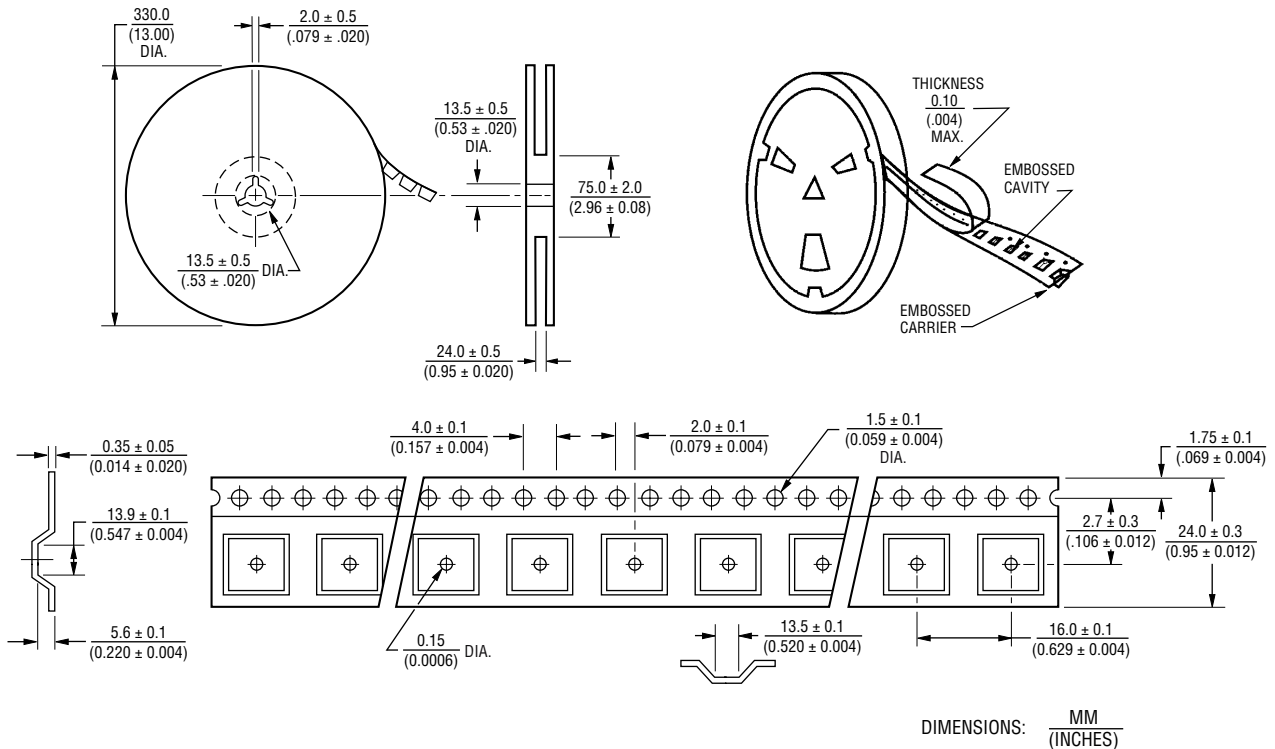
# SRP1250 Series - Shielded Power Inductors

**BOURNS®**

## L vs. I Charts



## Packaging Specifications



REV. 06/19

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