



**THE DATASHEET OF  
SRP1235-6R8M**





### Features

- Shielded construction
- Unit height of 3.7 mm
- Inductance range: 0.1 to 10  $\mu$ H
- Current up to 43 A
- RoHS compliant\*

This series is currently available, but not recommended for new designs. The newer [SRP1238A](#) series is recommended.

## SRP1235 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.	SRF (MHz) Typ.
SRP1235-R10M	0.10	43.0	56	0.96	105
SRP1235-R15M	0.15	41.0	50	1.2	100
SRP1235-R22M	0.22	38.5	50	1.3	94
SRP1235-R33M	0.33	36.5	50	1.5	90
SRP1235-R47M	0.47	32.0	44	2.0	85
SRP1235-R60M	0.60	29.0	42	2.5	73
SRP1235-R67M	0.67	28.0	40	2.5	72
SRP1235-R68M	0.68	28.0	40	2.5	72
SRP1235-R82M	0.82	25.0	38	3.0	65
SRP1235-1R0M	1.00	24.0	36	3.5	60
SRP1235-1R2M	1.20	21.0	29	4.5	37
SRP1235-1R5M	1.50	19.0	28	5.5	37
SRP1235-1R8M	1.80	16.5	24	7	32
SRP1235-2R2M	2.20	16.0	20	8	27
SRP1235-3R3M	3.30	12.0	18	12	20
SRP1235-4R7M	4.70	10.0	16	15	16
SRP1235-5R6M	5.60	10.0	14	18	15
SRP1235-6R8M	6.80	9.0	13	22	14
SRP1235-8R2M	8.20	8.5	12	28	12
SRP1235-100M	10.0	7.0	9.5	34	11

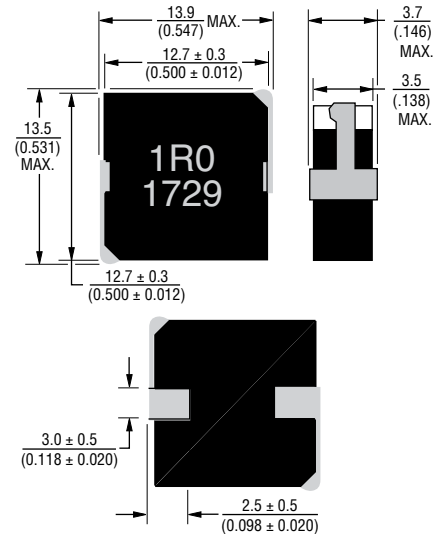
### General Specifications

Test Voltage ..... 1 V  
 Test Frequency ..... 100 KHz  
 Reflow Soldering .. 230 °C; 50 sec. max.  
 Operating Temperature  
 ..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature (On Board)  
 ..... -40 °C to +125 °C  
 Resistance to Soldering Heat  
 ..... +260 °C for 10 sec.  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM)..... N/A

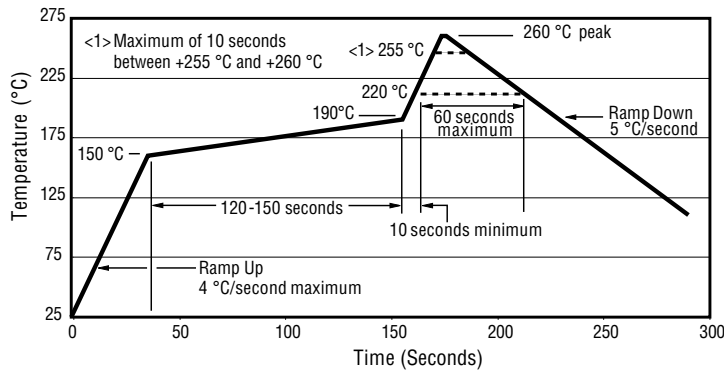
### Materials

Core ..... Iron  
 Wire ..... Enameled copper  
 Terminal ..... Cu/Sn  
 Rated Current ..... Ind. drops 20 % at Isat  
 Temperature Rise ..... 40 °C at rated Irms  
 Packaging ..... 600 pcs. per 13-inch reel

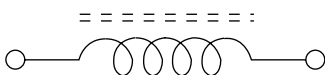
### Product Dimensions



### Soldering Profile



### Electrical Schematic



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

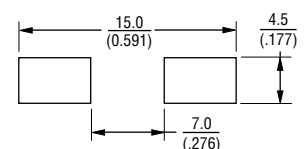
\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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### Recommended Layout

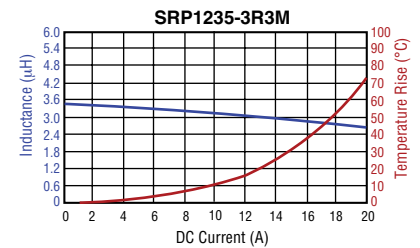
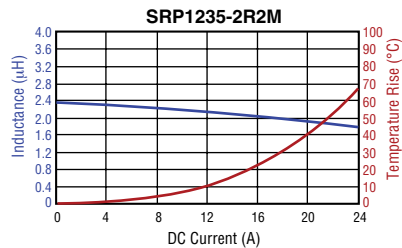
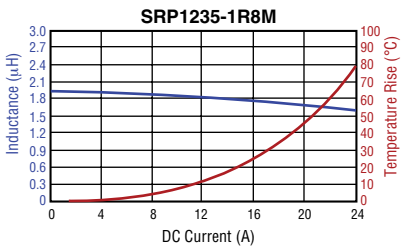
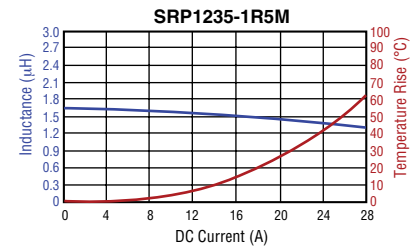
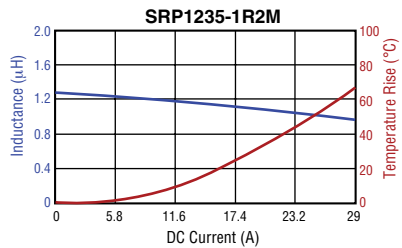
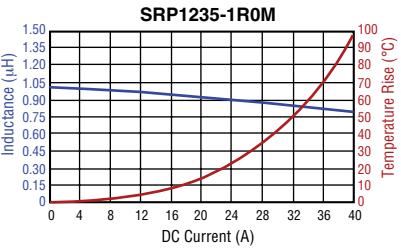
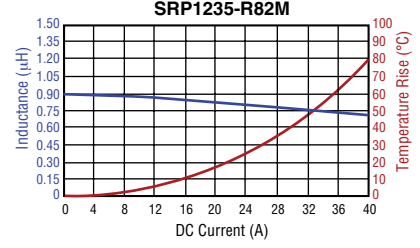
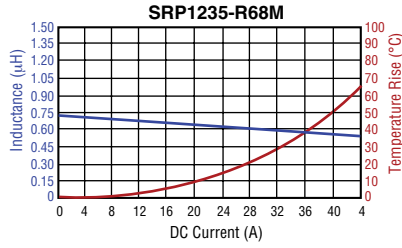
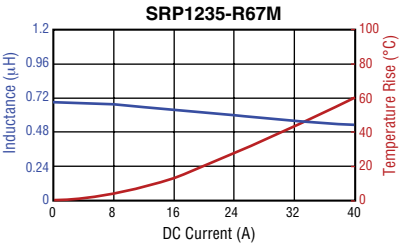
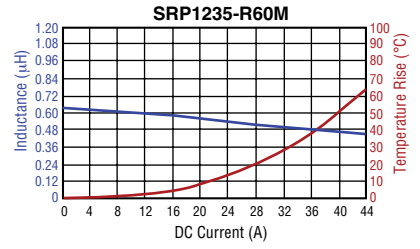
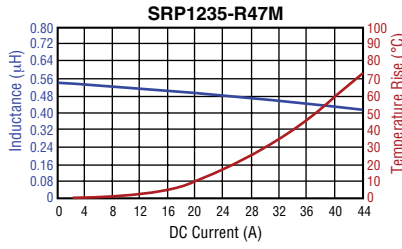
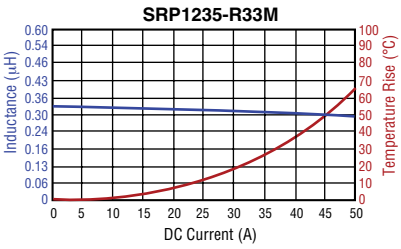
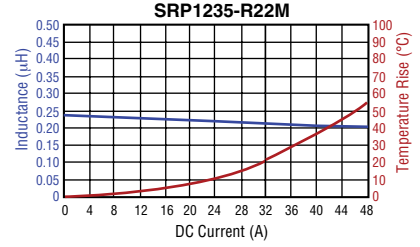
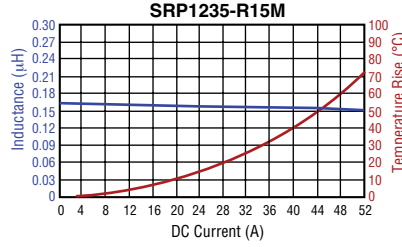
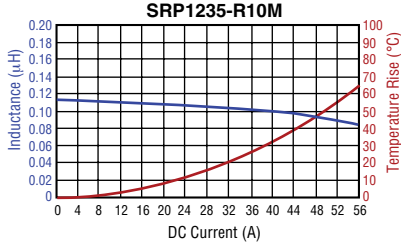


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

# SRP1235 Series - Shielded Power Inductors

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## L vs. I Charts

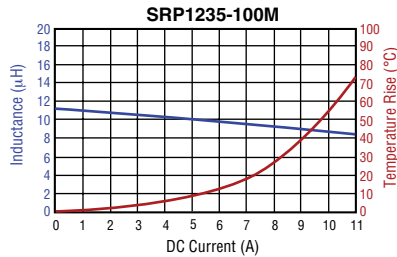
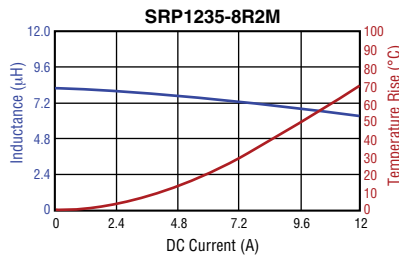
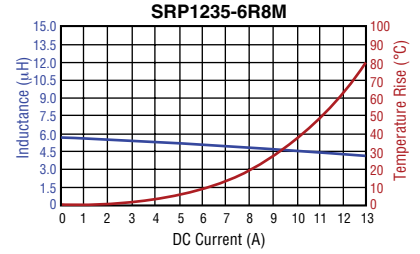
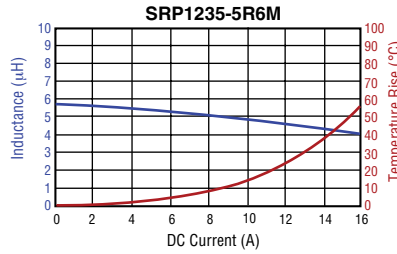
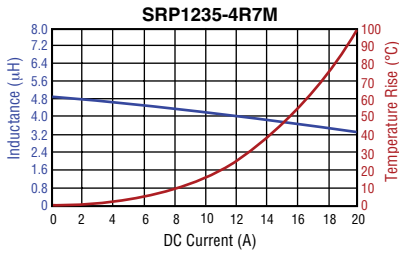


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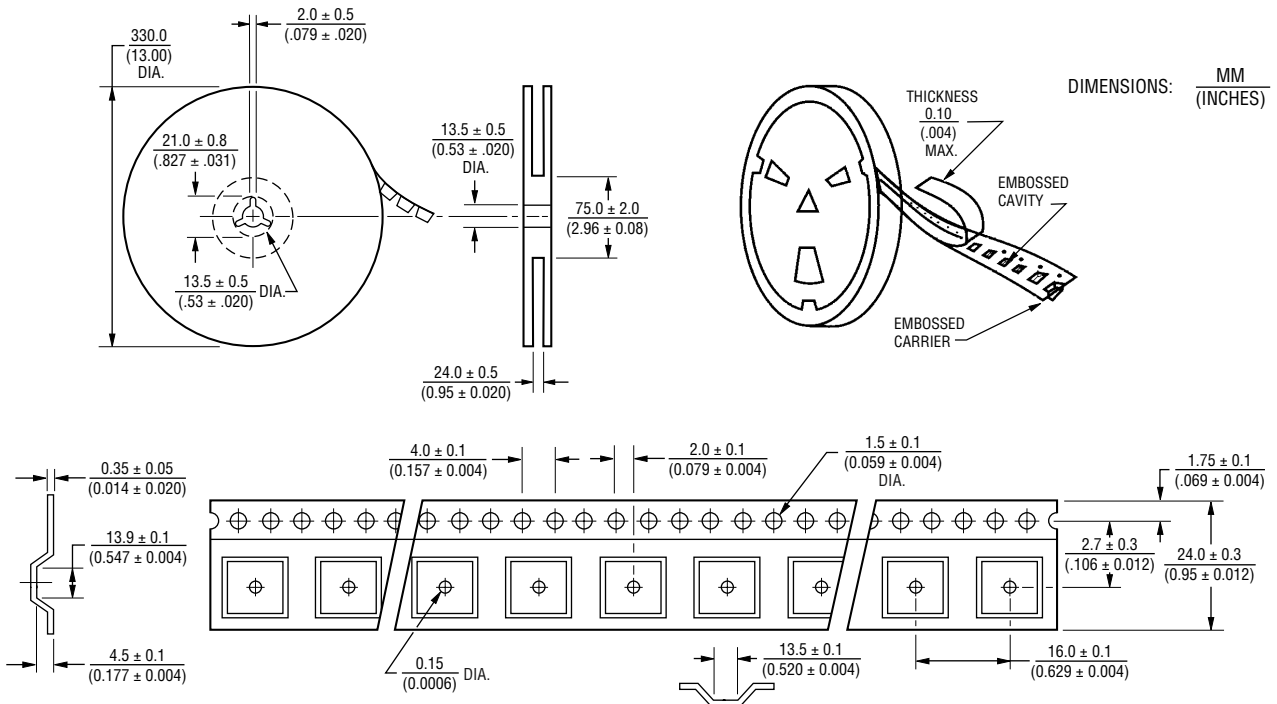
# SRP1235 Series - Shielded Power Inductors

**BOURNS®**

## L vs. I Charts



## Packaging Specifications



REV. 06/19

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