




## Features

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

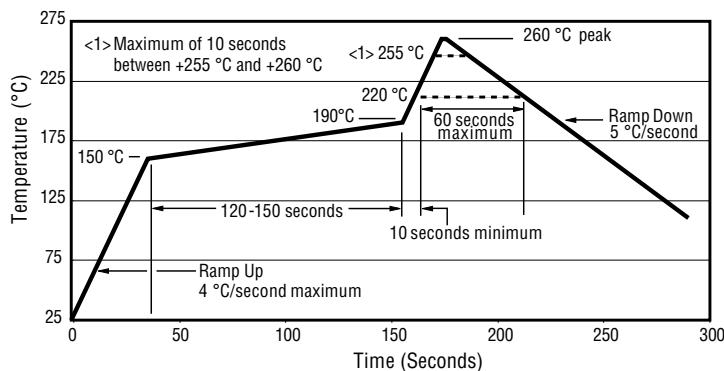
 This series is currently available, but not recommended for new designs. The newer SRP1238A series is recommended.

# 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

## Soldering Profile



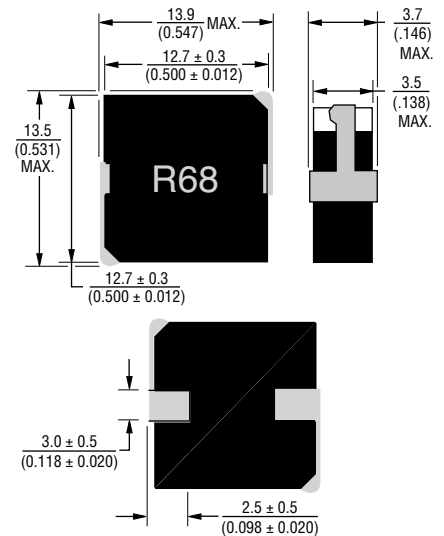
## General Specifications

Test Voltage .....0.25 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).....3B

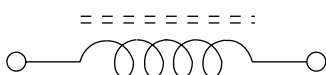
## Materials

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

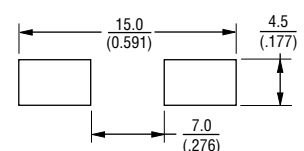
## Product Dimensions



## Electrical Schematic



## Recommended Layout



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

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

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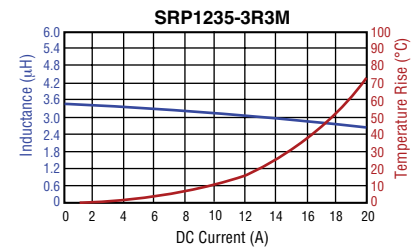
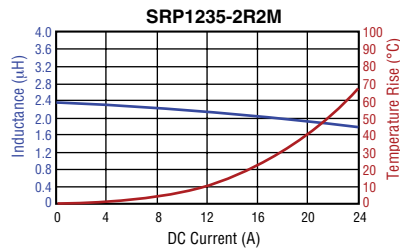
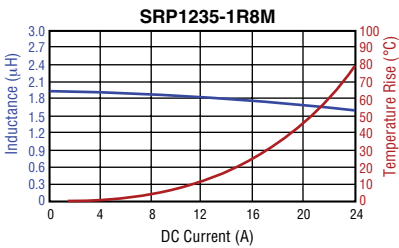
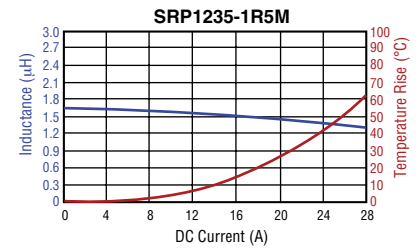
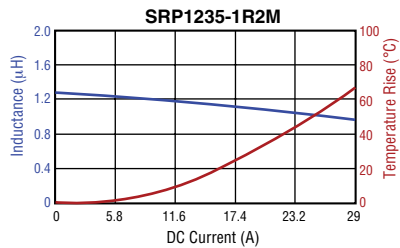
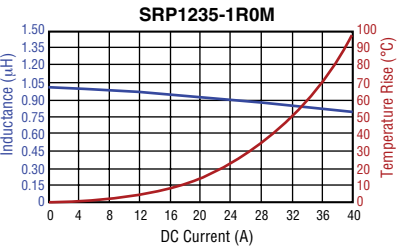
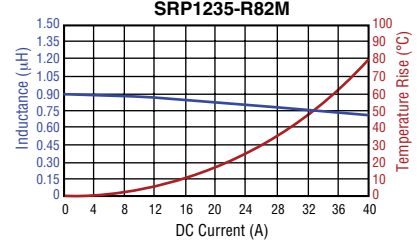
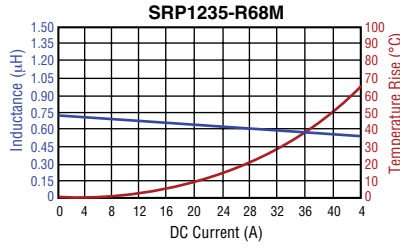
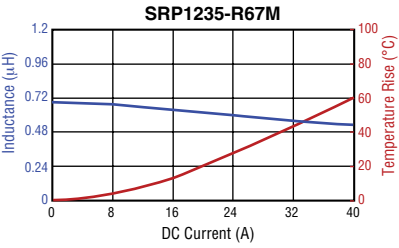
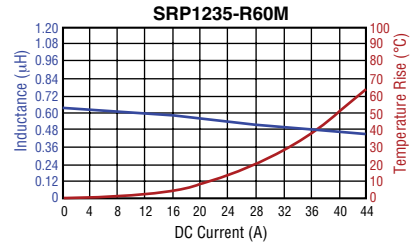
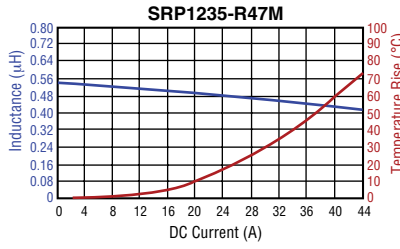
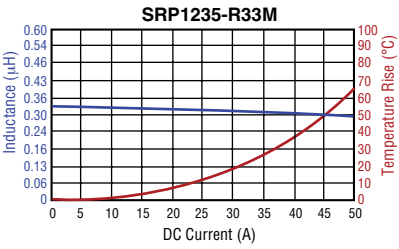
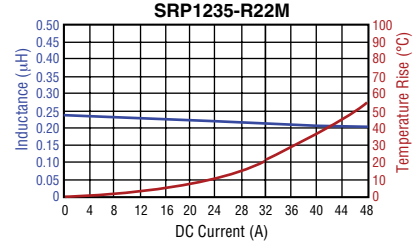
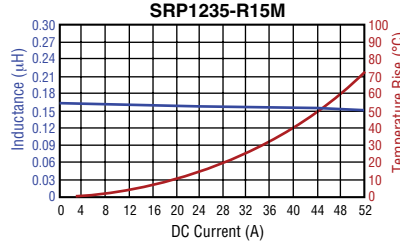
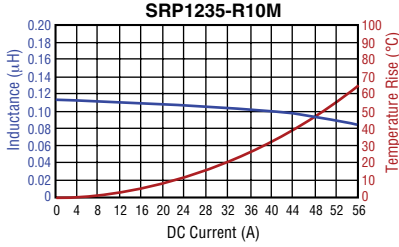
## Applications

- Input/output of DC/DC converters
- Power supplies for:
  - Portable communications equipment
  - Camcorders
  - LCD TVs
  - Car audio systems

# SRP1235 Series - Shielded Power Inductors

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## L vs. I Charts

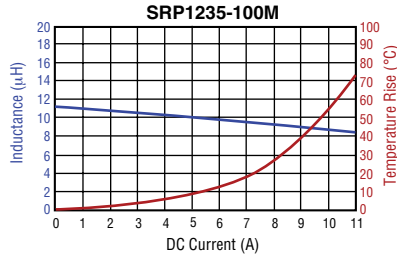
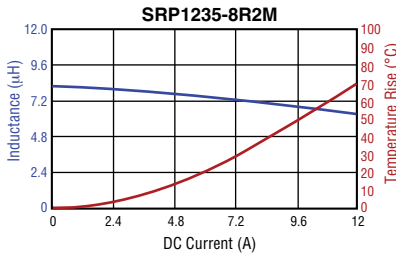
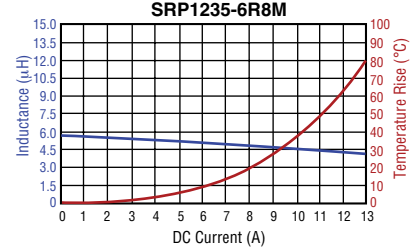
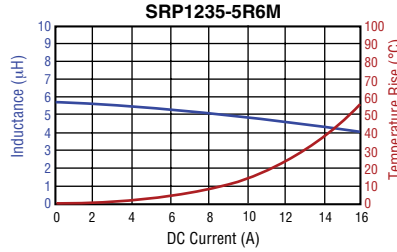
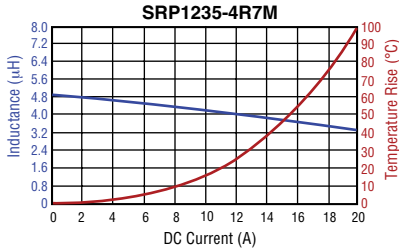


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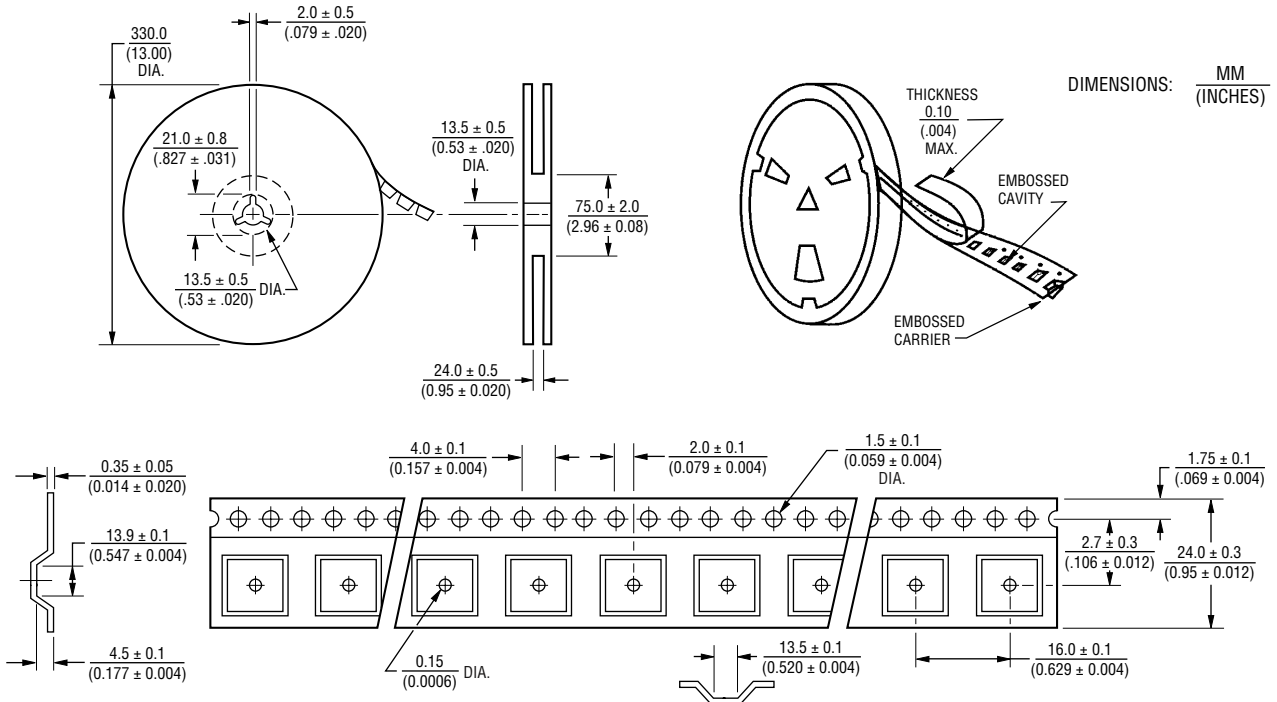
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**BOURNS®**

## L vs. I Charts



## Packaging Specifications



REV. 06/17

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