



### 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

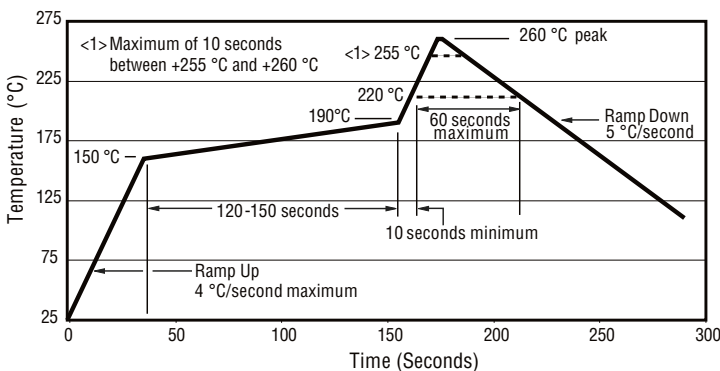
### General Specifications

Test Voltage ..... 0.25 V  
 Test Frequency ..... 100 KHz  
 Reflow Soldering .. 230  $^{\circ}$ C; 50 sec. max.  
 Operating Temperature  
 ..... -40  $^{\circ}$ C to +125  $^{\circ}$ C  
 (Temperature rise included)  
 Storage Temperature (On Board)  
 ..... -40  $^{\circ}$ C to +125  $^{\circ}$ C  
 Resistance to Soldering Heat  
 ..... +260  $^{\circ}$ C for 10 sec.  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM) ..... N/A

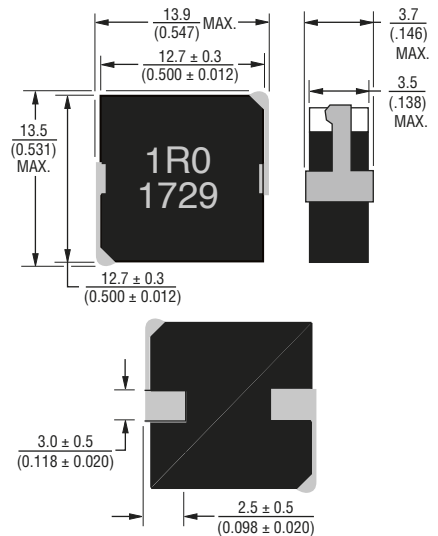
### Materials

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

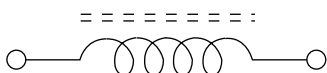
### Soldering Profile



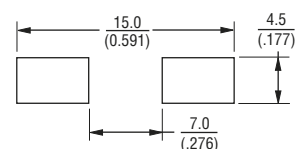
### Product Dimensions



### 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. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at [www.bourns.com/docs/legal/disclaimer.pdf](http://www.bourns.com/docs/legal/disclaimer.pdf)

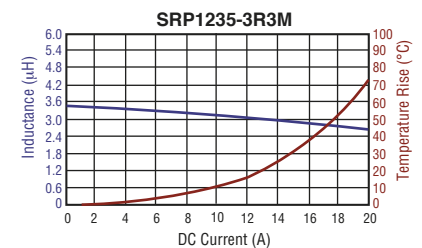
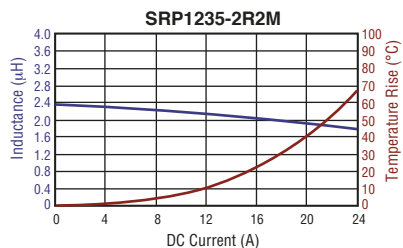
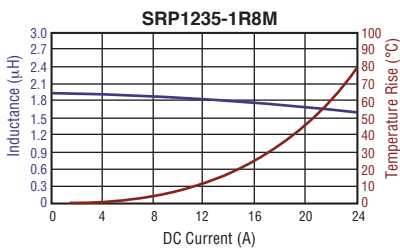
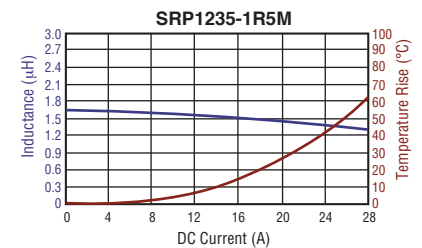
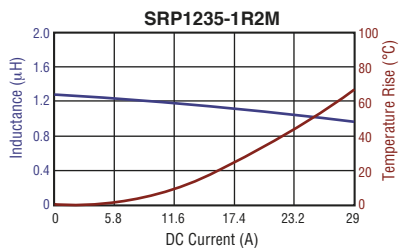
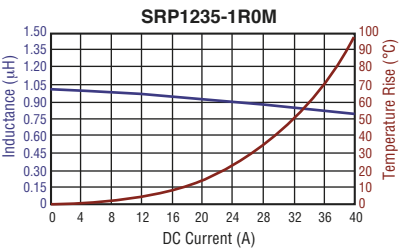
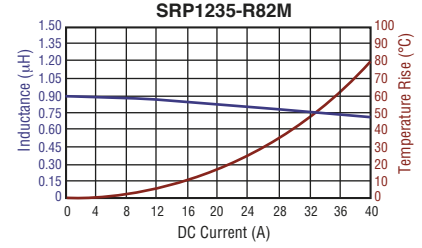
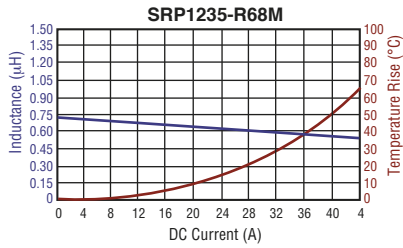
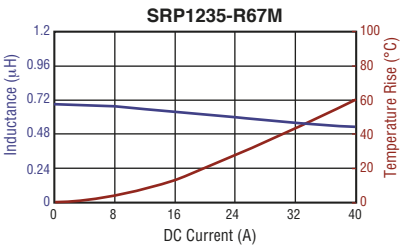
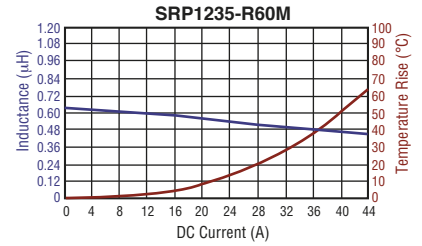
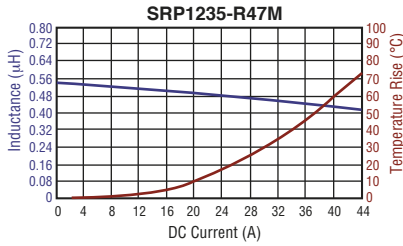
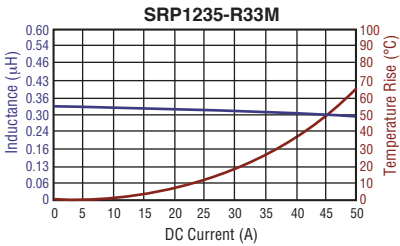
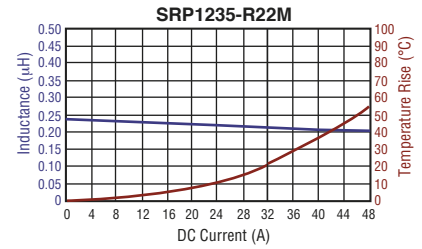
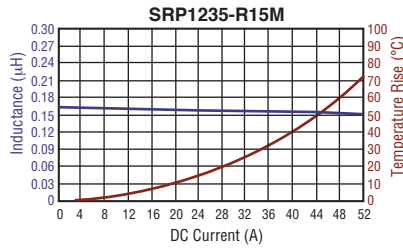
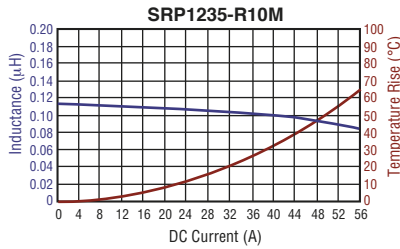
## Applications

- 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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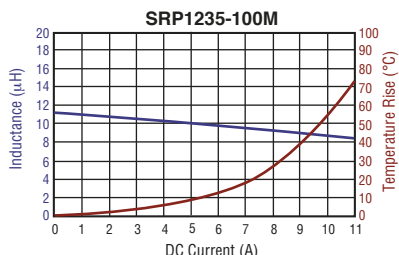
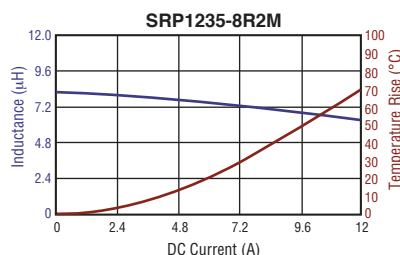
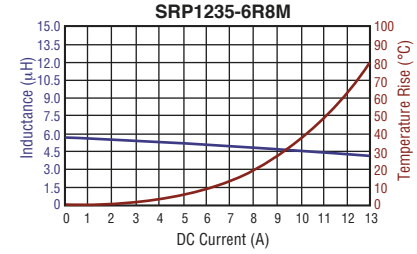
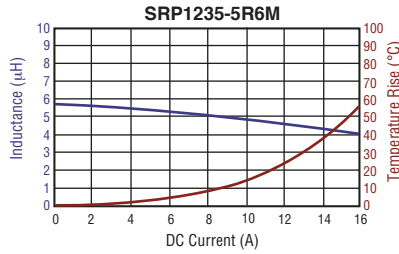
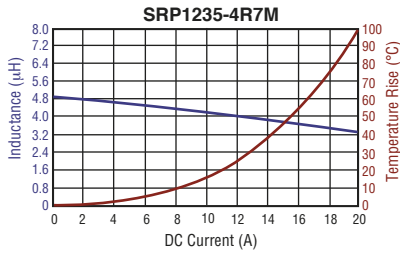
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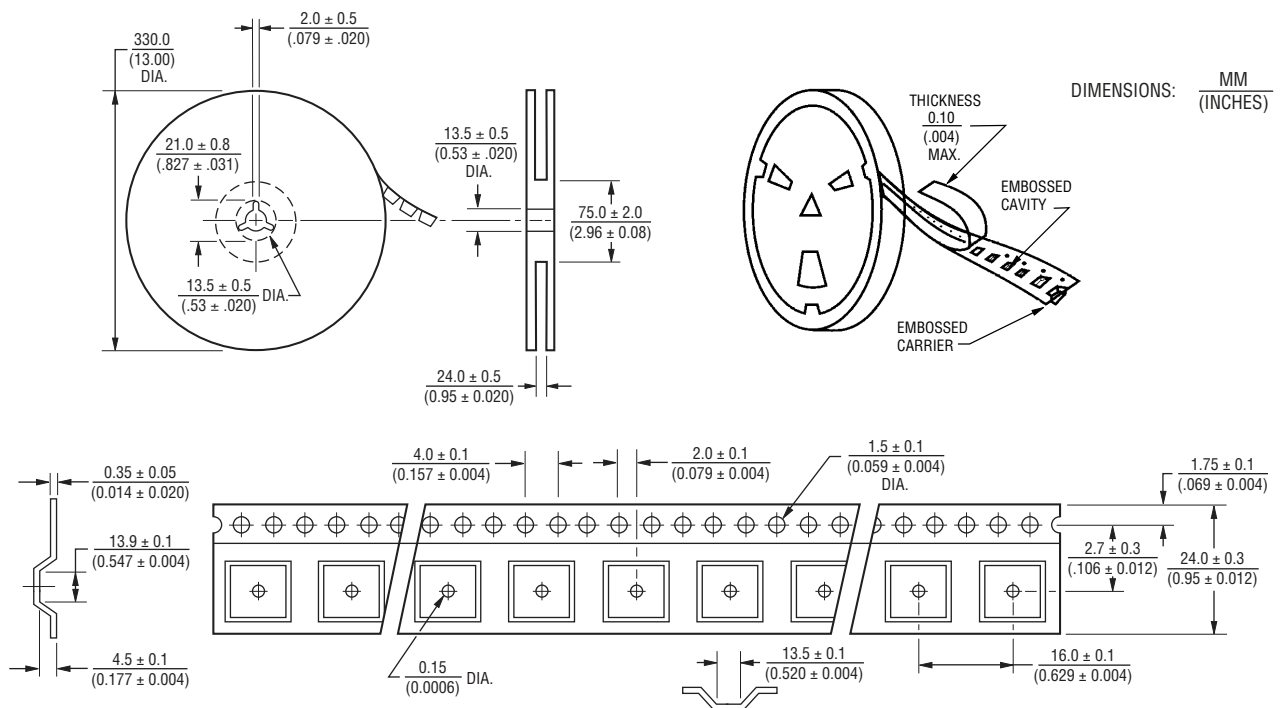
# SRP1235 Series - Shielded Power Inductors

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## L vs. I Charts



## Packaging Specifications



REV. 12/17

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