



### 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

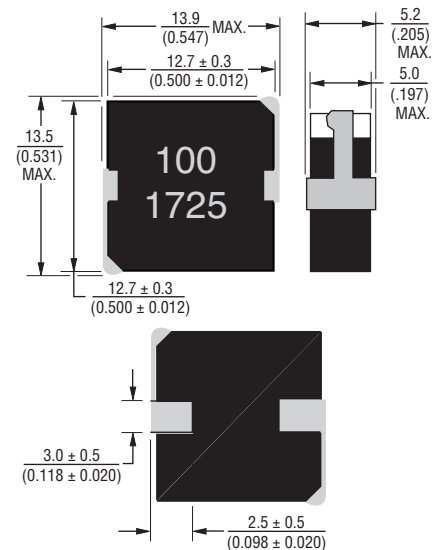
### General Specifications

Test Voltage .....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)..... N/A

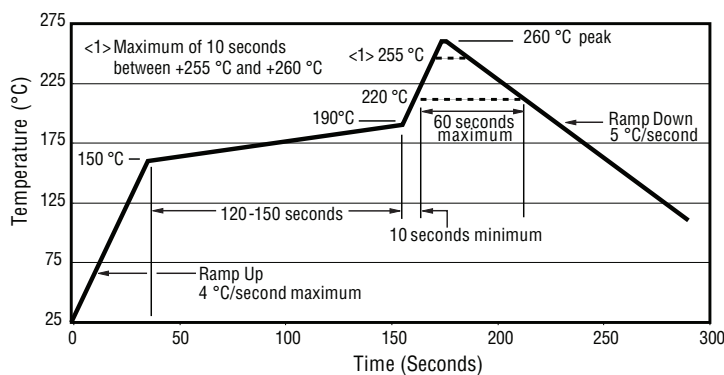
### Materials

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

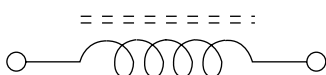
### Product Dimensions



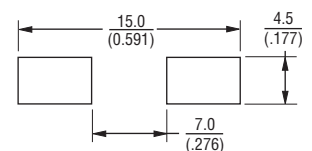
### Soldering Profile



### 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.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

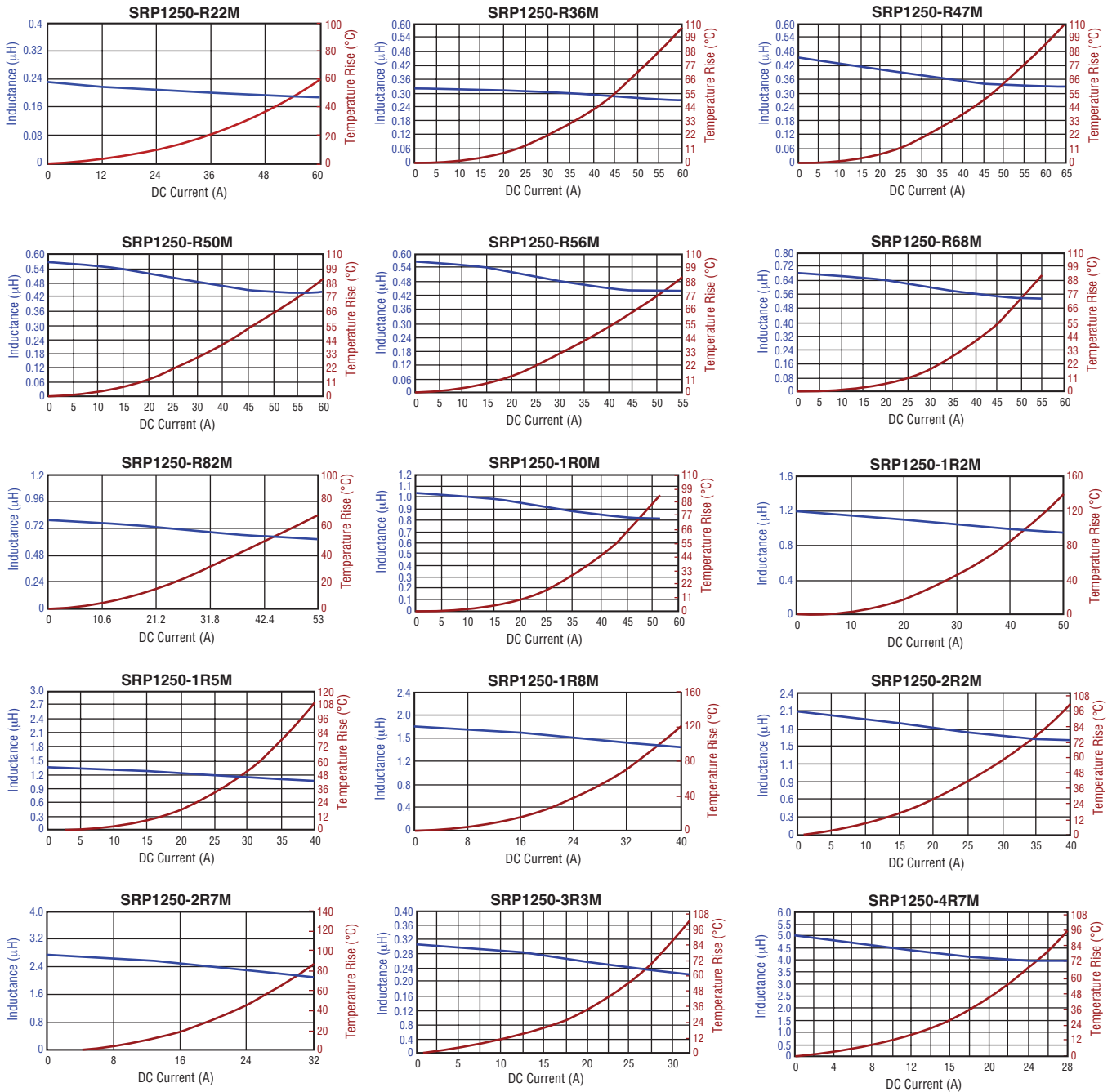
## Applications

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

# SRP1250 Series - Shielded Power Inductors

**BOURNS®**

### L vs. I Charts

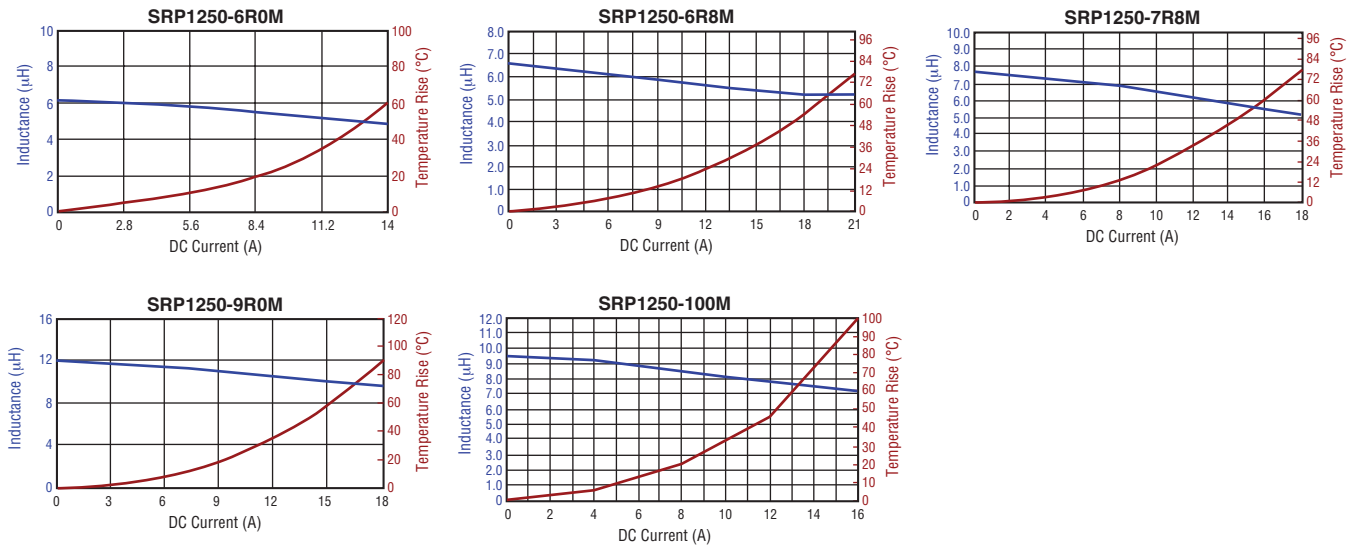


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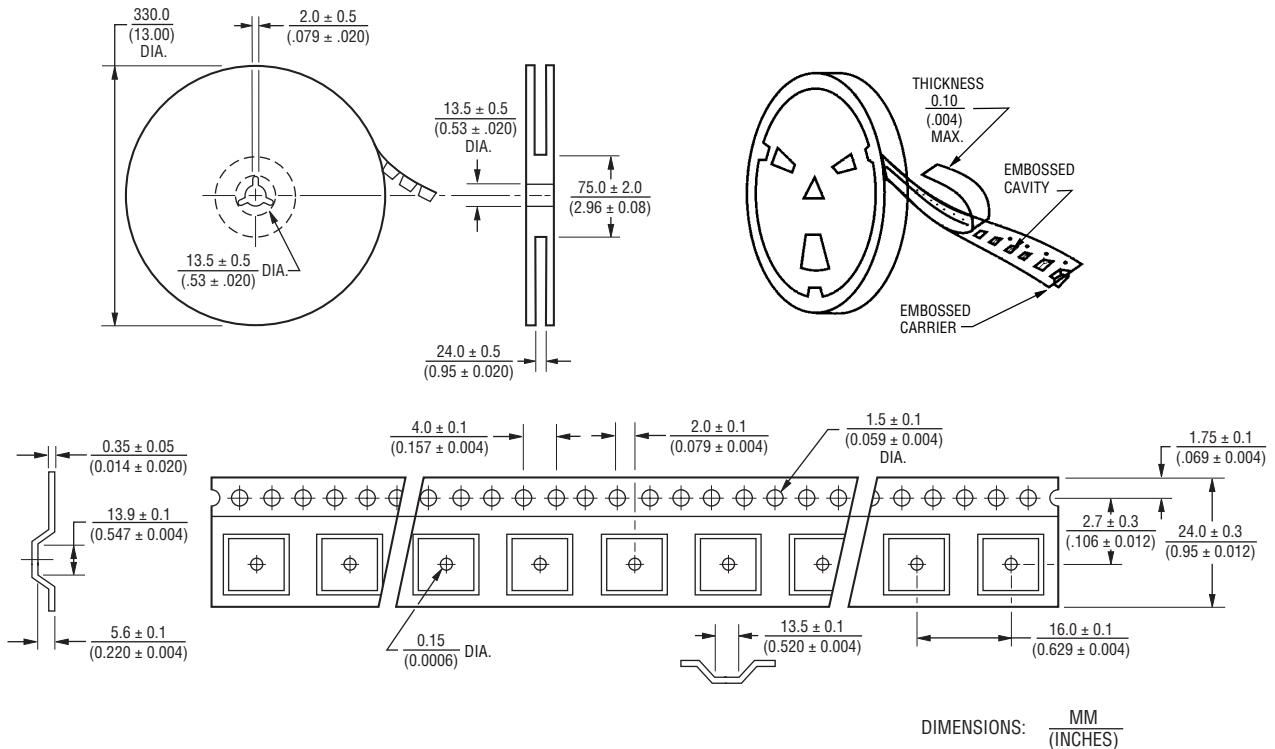
# SRP1250 Series - Shielded Power Inductors

**BOURNS®**

## L vs. I Charts



## Packaging Specifications



REV. 12/17

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