

### Features

- Shielded construction
- Unit height of 7.0 mm max.
- Current up to 41 A
- RoHS compliant\*

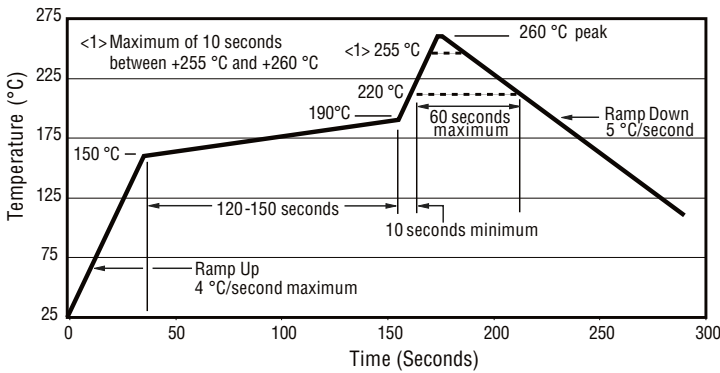
 This series is currently available, but not recommended for new designs. The newer SRP1265A series is recommended.

## SRP1270 Series - Shielded Power Inductors

### Electrical Specifications

| Bourns Part No. | Inductance L (μH) ±20 % | I rms (A) | I sat (A) | DCR (mΩ) Max. | SRF (MHz) Typ. |
|-----------------|-------------------------|-----------|-----------|---------------|----------------|
| SRP1270-R32M    | 0.32                    | 46        | 65        | 0.9           | 95             |
| SRP1270-R47M    | 0.47                    | 41        | 65        | 1.2           | 85             |
| SRP1270-R68M    | 0.68                    | 35        | 60        | 1.6           | 65             |
| SRP1270-1R0M    | 1.0                     | 32        | 50        | 2.1           | 45             |
| SRP1270-1R5M    | 1.5                     | 27        | 48        | 2.6           | 31             |
| SRP1270-1R8M    | 1.8                     | 24        | 41        | 3.2           | 31             |
| SRP1270-2R2M    | 2.2                     | 22        | 40        | 4.2           | 25             |
| SRP1270-3R3M    | 3.3                     | 18        | 35        | 6.6           | 20             |
| SRP1270-4R7M    | 4.7                     | 15        | 30        | 11.2          | 15             |
| SRP1270-5R6M    | 5.6                     | 14        | 26.5      | 10.0          | 13             |
| SRP1270-6R8M    | 6.8                     | 12        | 21        | 14.0          | 12             |
| SRP1270-8R2M    | 8.2                     | 11        | 17        | 15.5          | 11             |
| SRP1270-100M    | 10.0                    | 10        | 16        | 16.8          | 10             |

### Soldering Profile



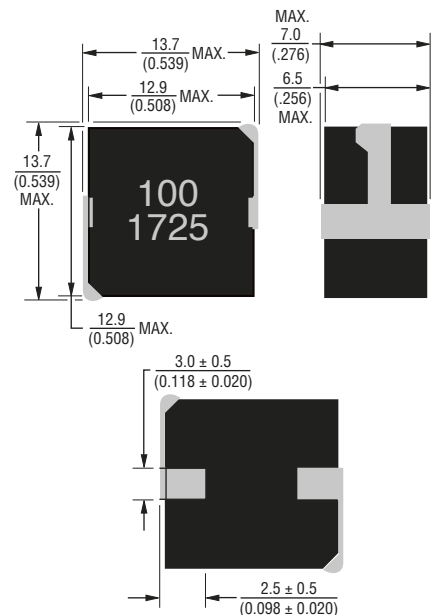
### General Specifications

Test Voltage ..... 1.0 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

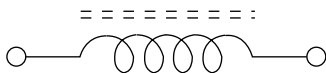
### Materials

Core ..... Iron  
 Wire ..... Enameled copper  
 Adhesive ..... Epoxy resin  
 Terminal ..... Ag/Ni/Sn  
 Rated Current ..... Ind. drops 20 % at Isat  
 Temperature Rise ..... 40 °C at rated Irms  
 Packaging ..... 400 pcs. per 13-inch reel

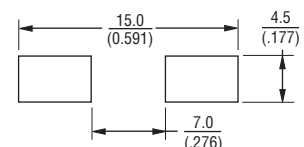
### Product Dimensions



### Electrical Schematic



### Recommended Layout



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



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

\*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)

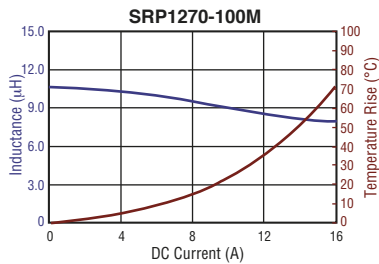
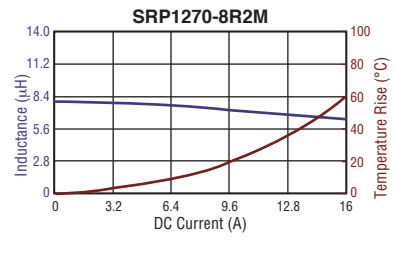
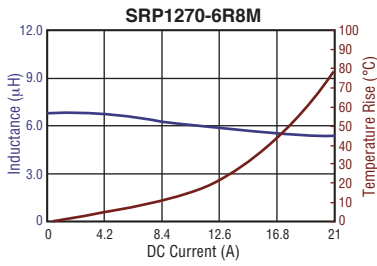
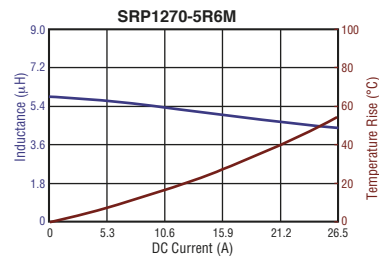
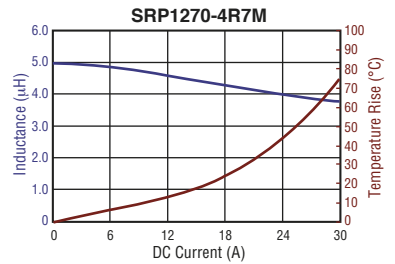
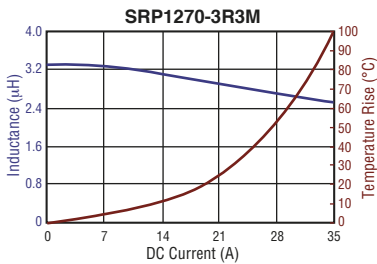
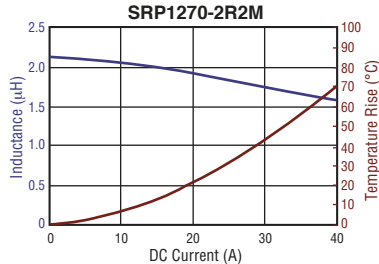
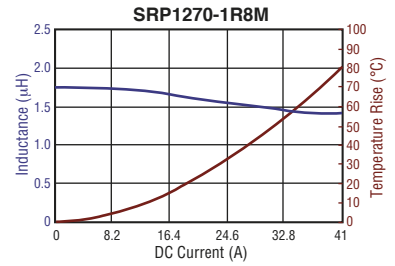
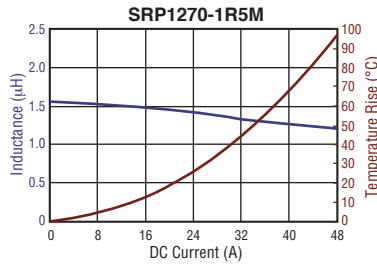
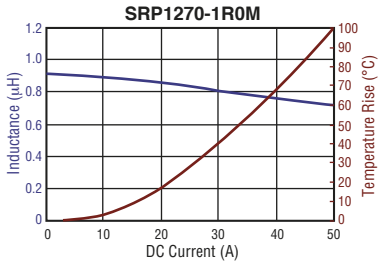
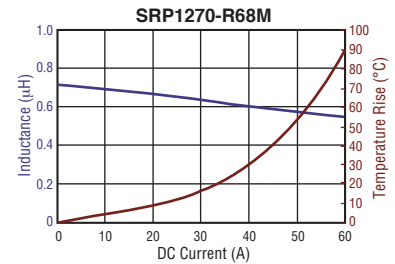
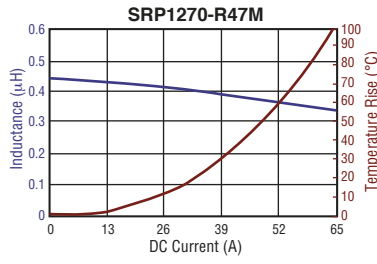
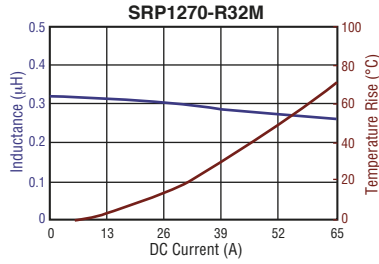
## Applications

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

# SRP1270 Series - Shielded Power Inductors

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## L vs. I Charts



Specifications are subject to change without notice.

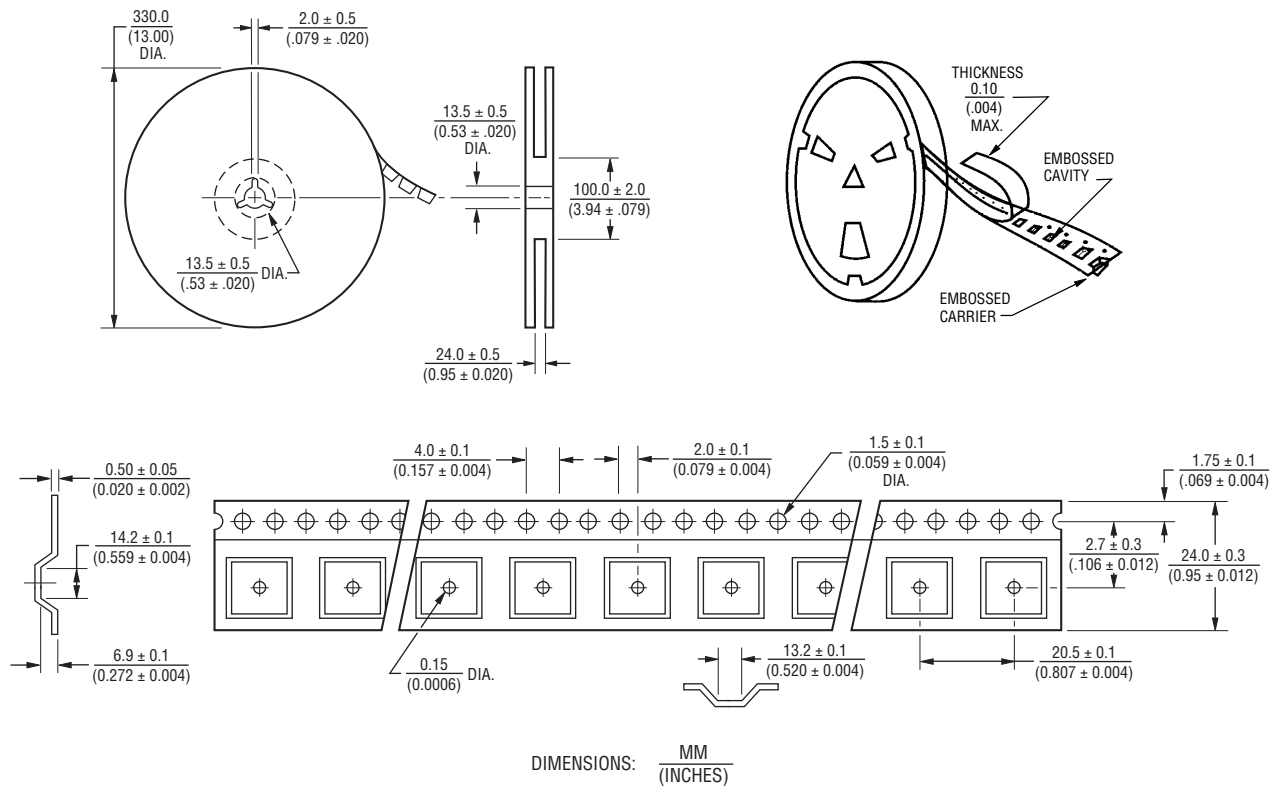
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## Packaging Specifications



REV. 12/17

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