



### Features

- Shielded construction
- Unit height of 3.7 mm
- Inductance range: 0.1  $\mu$ H to 6.8  $\mu$ H
- Current up to 43 A
- Lead free
- RoHS compliant\*

### Applications

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

## SRP1235 Series - Shielded Power Inductors

### Electrical Specifications

| Bourns Part No. | Inductance L ( $\mu$ H) | I rms (A) | I sat (A) | DCR (m $\Omega$ ) max. |
|-----------------|-------------------------|-----------|-----------|------------------------|
| SRP1235-R10M    | 0.10                    | 43.0      | 56        | 0.96                   |
| SRP1235-R15M    | 0.15                    | 41.0      | 50        | 1.2                    |
| SRP1235-R22M    | 0.22                    | 38.5      | 50        | 1.3                    |
| SRP1235-R33M    | 0.33                    | 36.5      | 50        | 1.5                    |
| SRP1235-R47M    | 0.47                    | 32.0      | 44        | 2.0                    |
| SRP1235-R60M    | 0.60                    | 29.0      | 42        | 2.5                    |
| SRP1235-R68M    | 0.68                    | 28.0      | 40        | 2.5                    |
| SRP1235-R82M    | 0.82                    | 25.0      | 38        | 3.0                    |
| SRP1235-1R0M    | 1.00                    | 24.0      | 36        | 3.5                    |
| SRP1235-1R5M    | 1.50                    | 19.0      | 28        | 5.5                    |
| SRP1235-1R8M    | 1.80                    | 16.5      | 24        | 7                      |
| SRP1235-2R2M    | 2.20                    | 16.0      | 20        | 8                      |
| SRP1235-3R3M    | 3.30                    | 12.0      | 18        | 12                     |
| SRP1235-4R7M    | 4.70                    | 10.0      | 16        | 15                     |
| SRP1235-5R6M    | 5.60                    | 10.0      | 14        | 18                     |
| SRP1235-6R8M    | 6.80                    | 9.0       | 13        | 22                     |

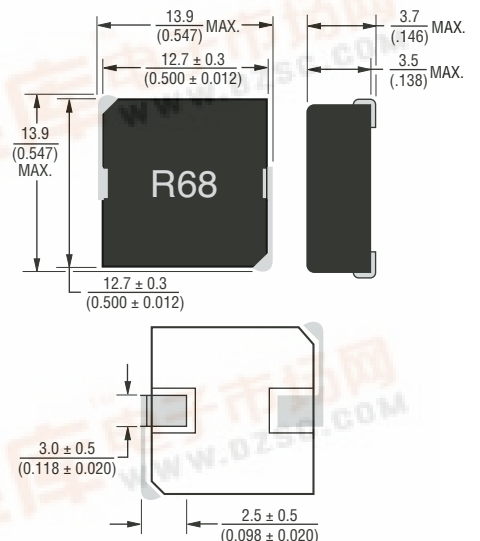
### General Specifications

Test Voltage.....0.25 V  
 Test Frequency .....100 KHz  
 Reflow Soldering.....230 °C; 50 sec max.  
 Operating Temperature...-55 °C to +150 °C  
 (Temperature rise included)  
 Storage Temperature...-55 °C to +150 °C  
 Resistance to Soldering Heat  
 .....+260 °C for 10 sec.

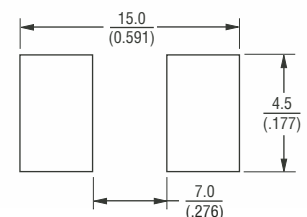
### Materials

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

### Product Dimensions

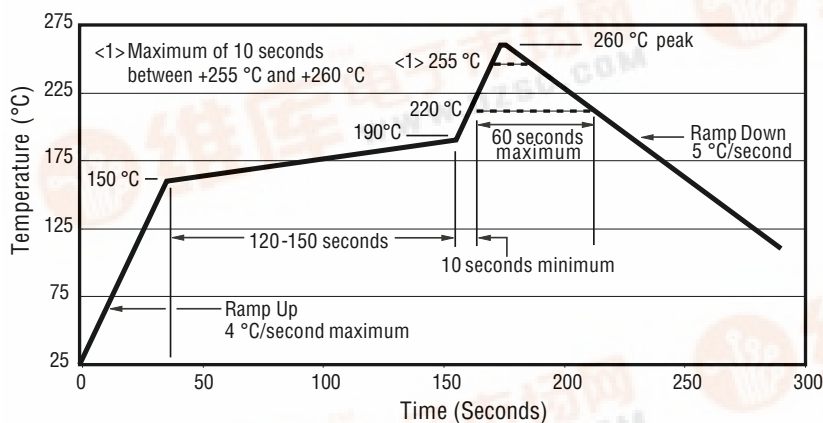


### Recommended Layout

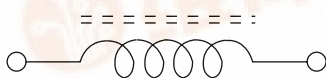


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

### Soldering Profile



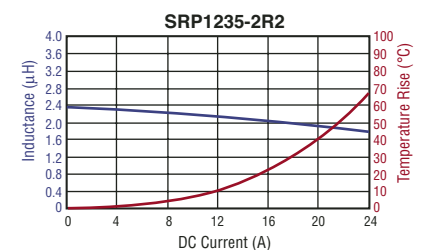
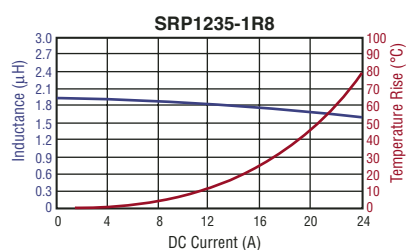
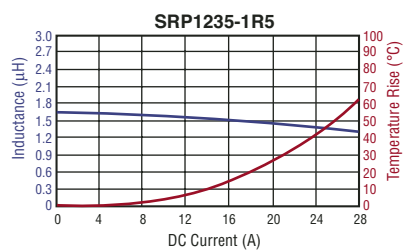
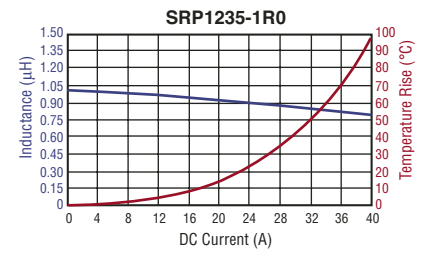
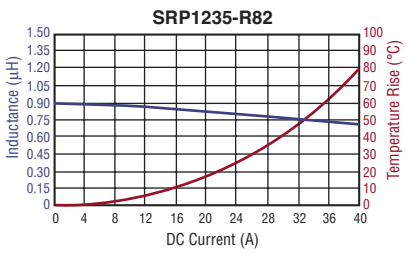
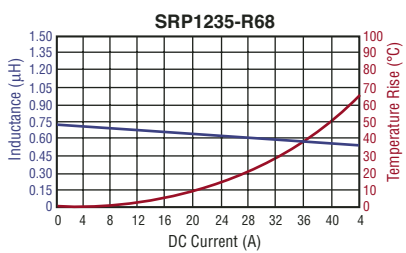
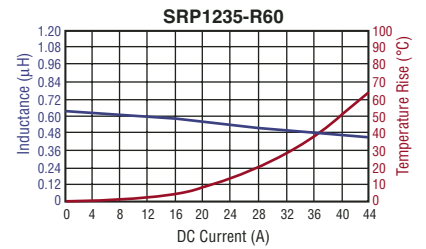
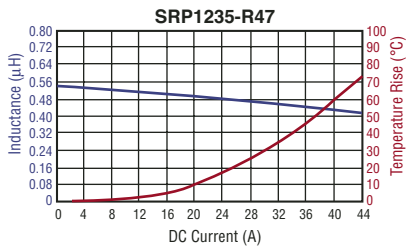
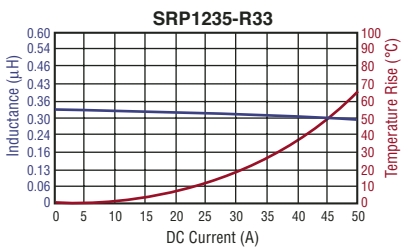
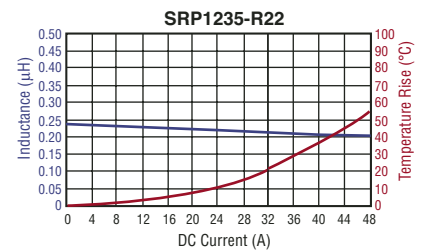
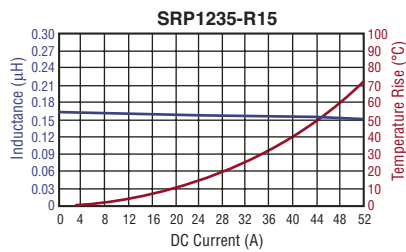
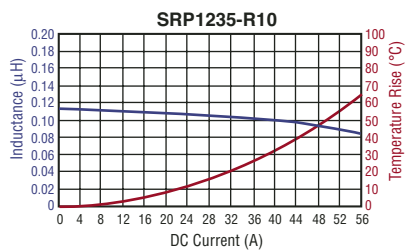
### Electrical Schematic



# SRP1235 Series - Shielded Power Inductors

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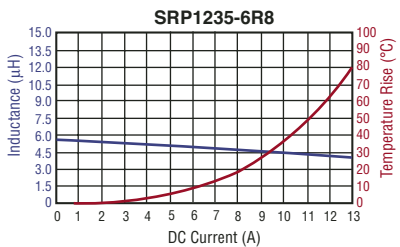
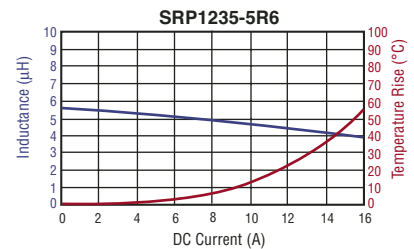
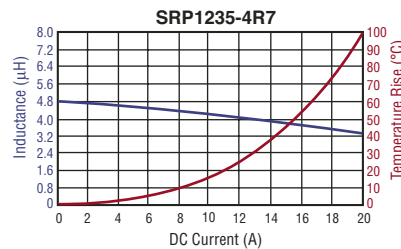
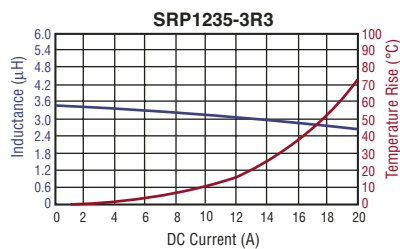
## L vs. I Charts



# SRP1235 Series - Shielded Power Inductors

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## L vs. I Charts



## Packaging Specifications

