



## Features

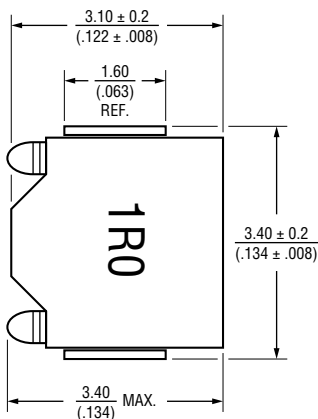
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Flat wire
- RoHS compliant\* and halogen free\*\*

## SRP0315 Series - Shielded Power Inductors

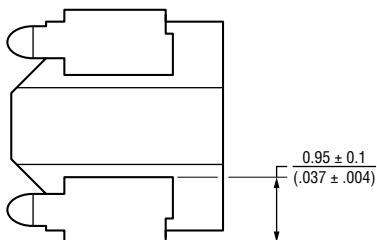
### Electrical Specifications @ 25 °C

| Bourns Part Number | Inductance @ 100 kHz / 1 V |          | Q Typ. | Q Test Freq, (MHz) | SRF (MHz) Typ. | DCR (mΩ) Typ. | DCR (mΩ) Max. | I <sub>rms</sub> (A) Typ. | I <sub>sat</sub> (A) Typ. |
|--------------------|----------------------------|----------|--------|--------------------|----------------|---------------|---------------|---------------------------|---------------------------|
|                    | L (μH)                     | Tol. (%) |        |                    |                |               |               |                           |                           |
| SRP0315-R47K       | 0.47                       | 10       | 10     | 25.2               | 85             | 10.6          | 12.3          | 9.0                       | 8.1                       |
| SRP0315-R68K       | 0.68                       | 10       | 8      | 25.2               | 76             | 14.6          | 17.2          | 7.1                       | 6.4                       |
| SRP0315-1R0K       | 1.00                       | 10       | 25     | 7.96               | 52             | 24.3          | 28.1          | 5.6                       | 6.5                       |
| SRP0315-1R5K       | 1.50                       | 10       | 14     | 7.96               | 46             | 40.5          | 48.0          | 4.1                       | 4.4                       |
| SRP0315-2R2K       | 2.20                       | 10       | 16     | 7.96               | 41             | 51.0          | 60.5          | 3.7                       | 3.6                       |
| SRP0315-3R3K       | 3.30                       | 10       | 25     | 7.96               | 34             | 110.0         | 129.0         | 2.5                       | 3.4                       |
| SRP0315-4R7K       | 4.70                       | 10       | 21     | 7.96               | 25             | 130.0         | 152.0         | 2.3                       | 2.7                       |

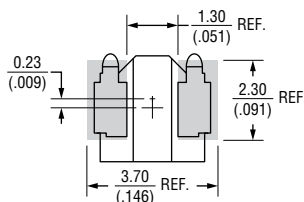
### Product Dimensions



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

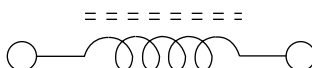


### Recommended Layout



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

### Electrical Schematic



### Additional Information

Click these links for more information:



### General Specifications

#### Operating Temperature

.....-40 °C to +125 °C  
(Temperature rise included)

#### Storage Temperature (Component)

.....-40 °C to +125 °C

#### Rated Current

..... Inductance drops 30 % at I<sub>sat</sub>

#### Temperature Rise ... 40 °C at rated I<sub>rms</sub><sup>1</sup>

Rated Voltage.....50 V

Moisture Sensitivity Level..... 1

ESD Classification (HBM)..... N/A

Note 1: Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

### Materials

Core..... Metal alloy powder

Wire..... Enameled copper

Terminal Finish..... Sn

Packaging..... 3000 pcs. per 13-inch reel

### How to Order

**SRP0315 - 4R7K**

Model \_\_\_\_\_

Value Code (see table) \_\_\_\_\_



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

\* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

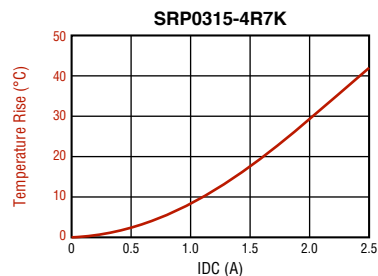
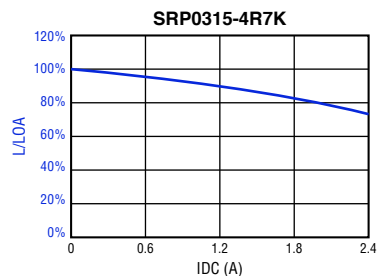
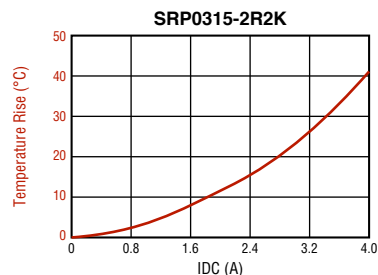
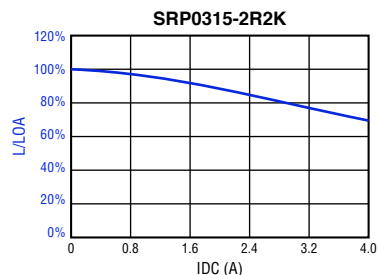
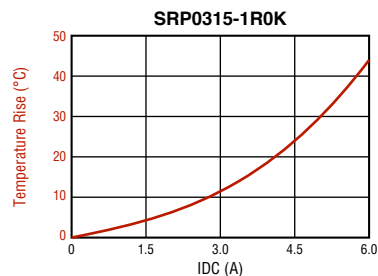
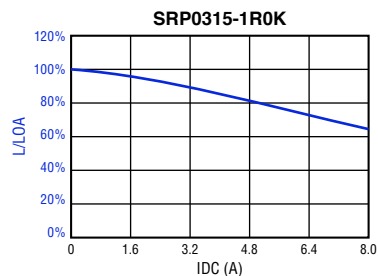
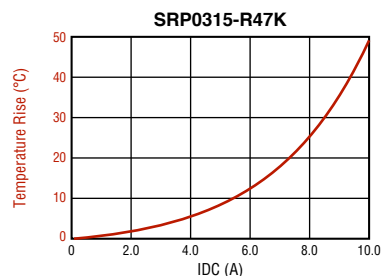
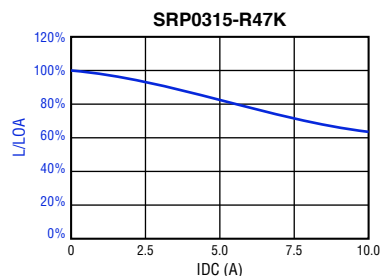
\*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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# SRP0315 Series - Shielded Power Inductors

**BOURNS®**

## L vs. I Charts



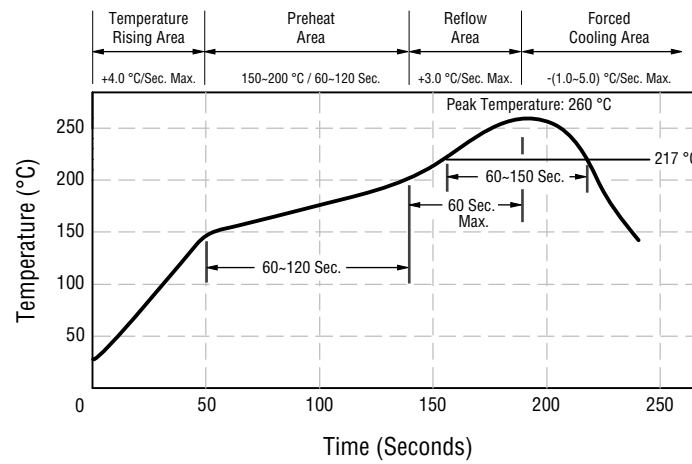
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## Soldering Profile

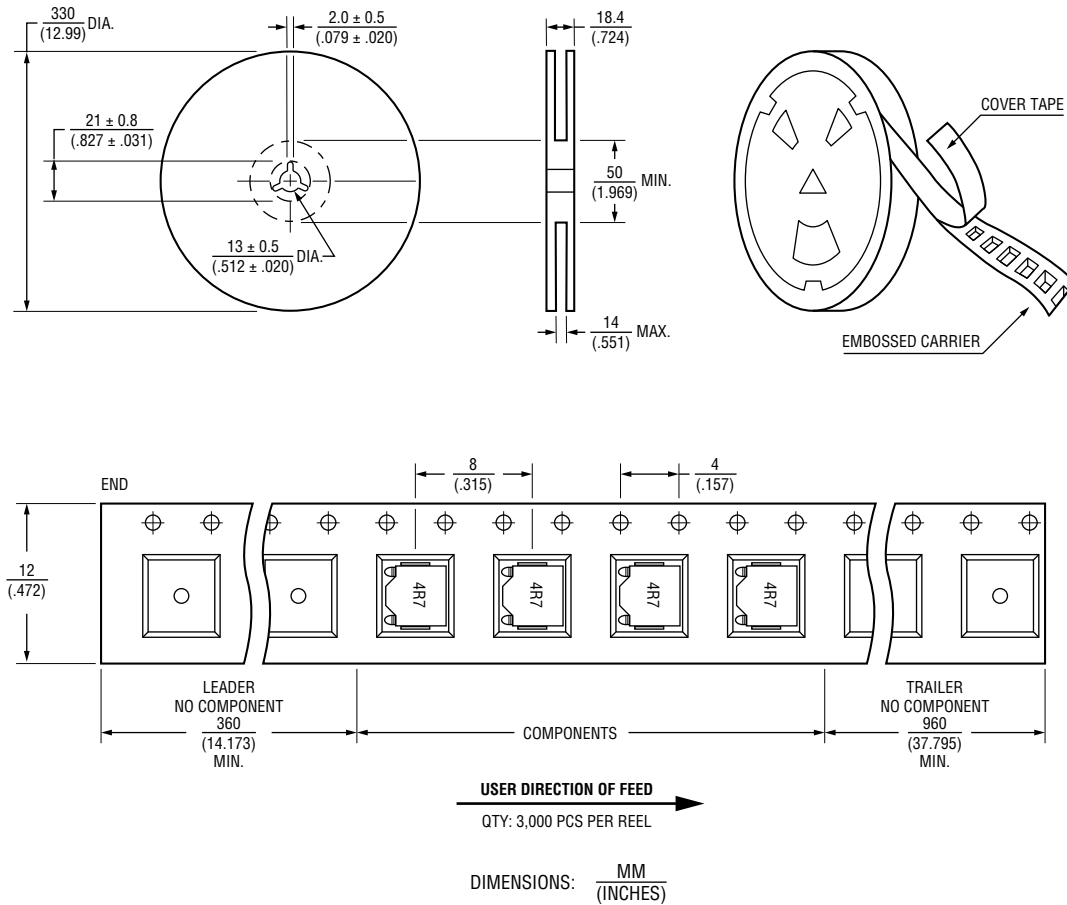
Peak Temperature: 260 °C max.  
Max. Peak Temperature -5 °C: 30 sec. max.  
Max. Time Above 217 °C: 60~150 sec. max.



## SRP0315 Series - Shielded Power Inductors

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### Packaging Specifications



**BOURNS®**

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