



## Features

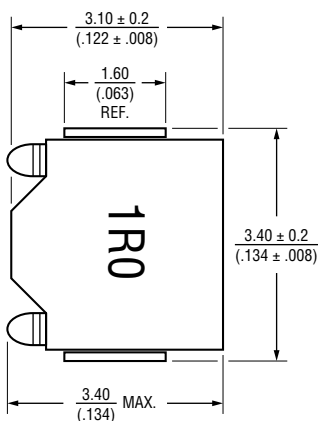
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Flat wire
- RoHS compliant\* and halogen free\*\*

## SRP0315 Series - Shielded Power Inductors

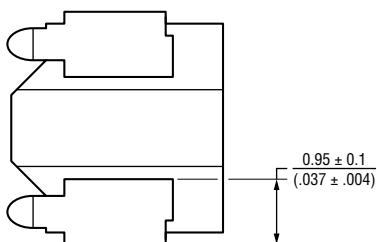
### Electrical Specifications @ 25 °C

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.	Isat (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

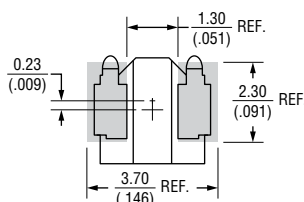
### Product Dimensions



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

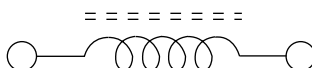


### Recommended Layout



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 Isat

#### 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.

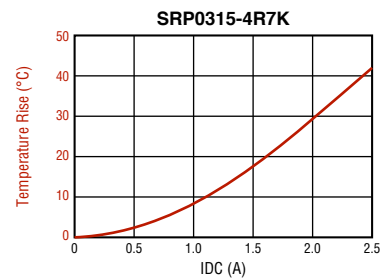
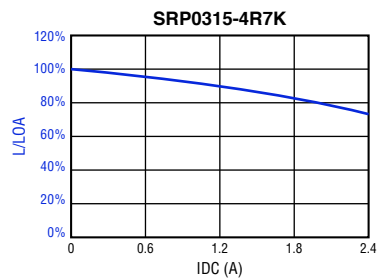
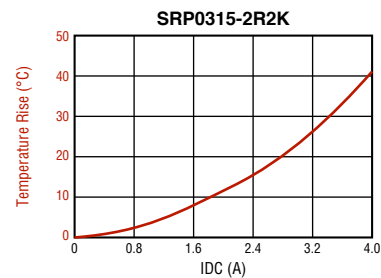
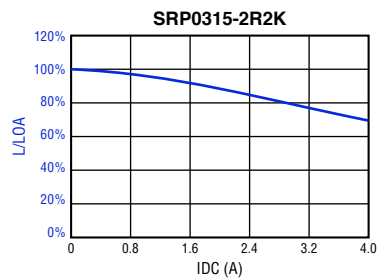
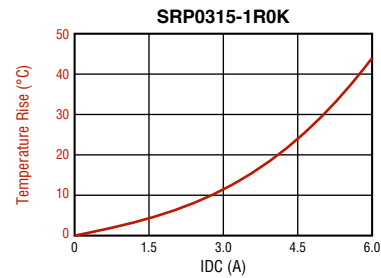
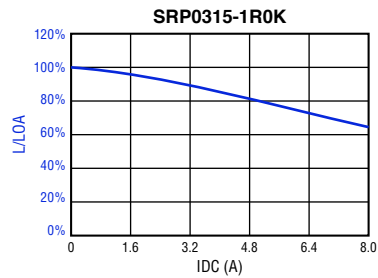
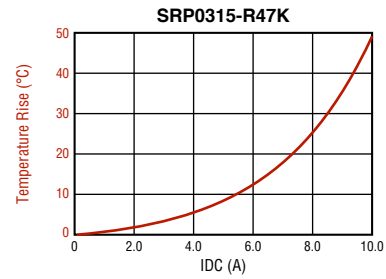
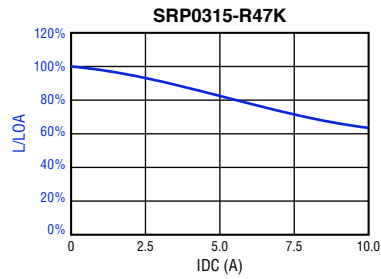
\*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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# SRP0315 Series - Shielded Power Inductors

**BOURNS®**

## L vs. I Charts



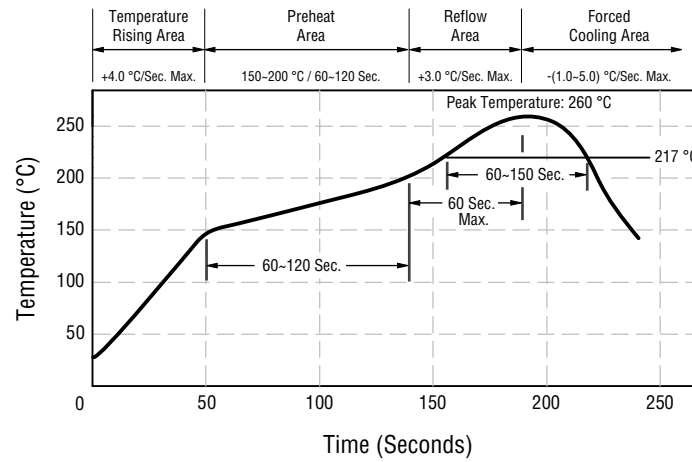
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## Soldering Profile

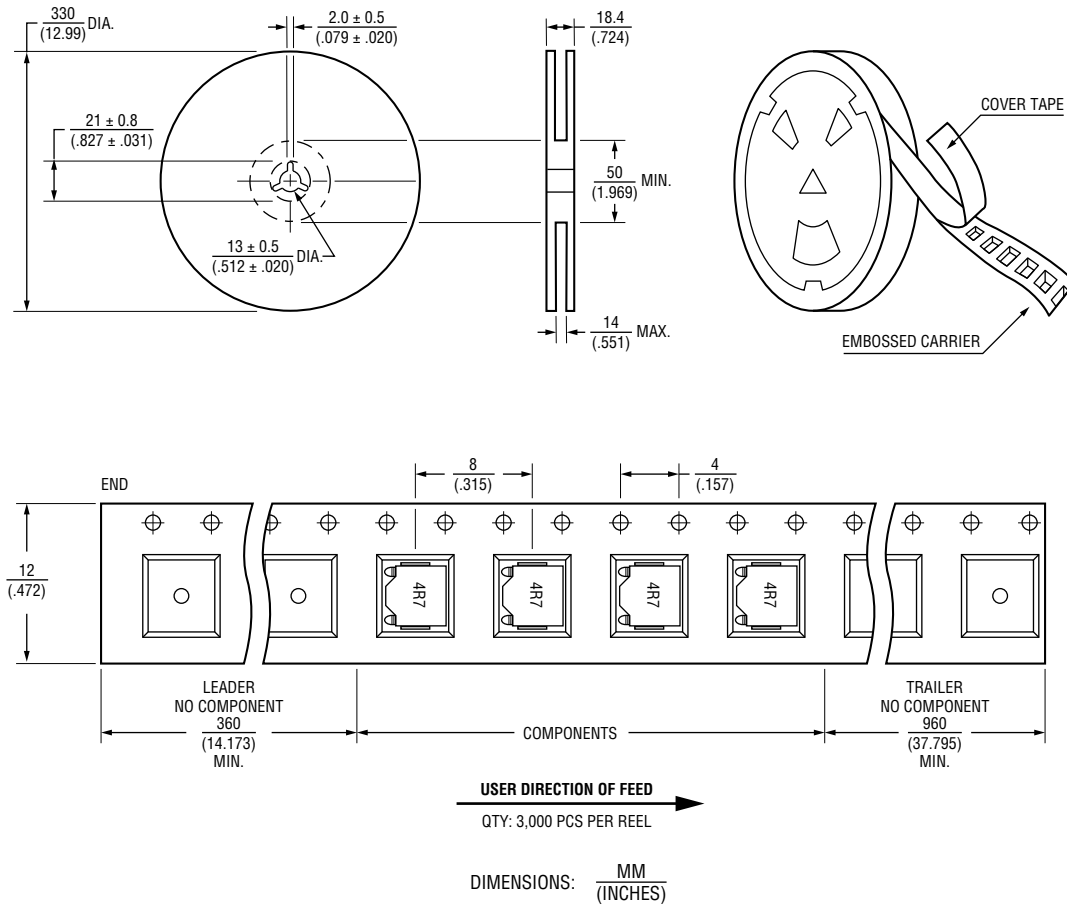
Peak Temperature: 260 °C max.  
Max. Peak Temperature -5 °C: 30 sec. max.  
Max. Time Above 217 °C: 60~150 sec. max.



## SRP0315 Series - Shielded Power Inductors

**BOURNS®**

### Packaging Specifications



**BOURNS®**

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