



**THE DATASHEET OF  
SRP0310-R68K**





## Features

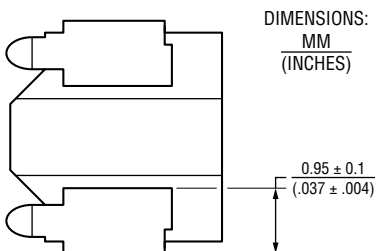
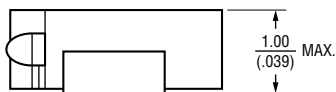
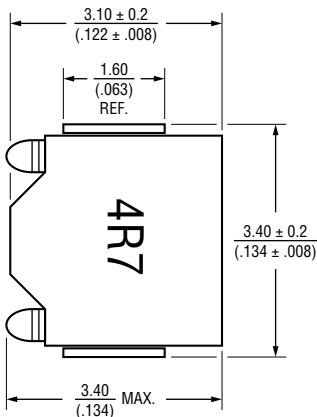
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Flat wire
- RoHS compliant\* and halogen free\*\*

## SRP0310 Series - Shielded Power Inductors

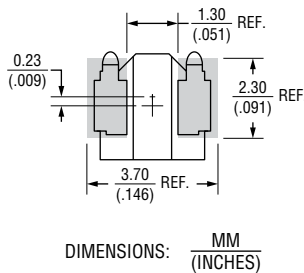
### Electrical Specifications @ 25 °C

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. (%)							
SRP0310-R47K	0.47	10	18	25.2	90	22.5	26.5	5.6	7.0
SRP0310-R68K	0.68	10	18	25.2	70	30.5	35.5	4.6	6.0
SRP0310-1R0K	1.00	10	16	7.96	64	49.0	58.5	3.4	5.6
SRP0310-1R5K	1.50	10	16	7.96	56	88.0	105.0	2.4	4.2
SRP0310-2R2K	2.20	10	16	7.96	40	99.5	118.0	2.3	2.7
SRP0310-3R3K	3.30	10	12	7.96	32	135.0	160.0	2.1	2.2
SRP0310-4R7K	4.70	10	18	7.96	25	183.0	215.0	1.8	2.1

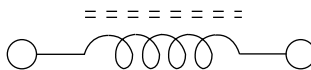
### Product Dimensions



### Recommended Layout



### 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>  
 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 ..... 4000 pcs. per 13-inch reel

### How to Order

**SRP0310 - 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.

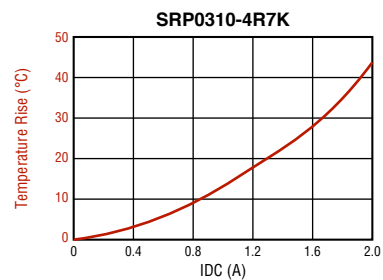
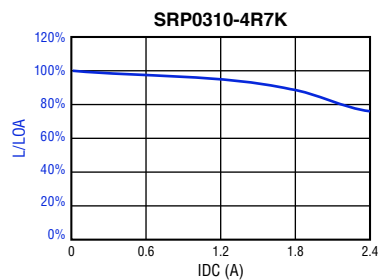
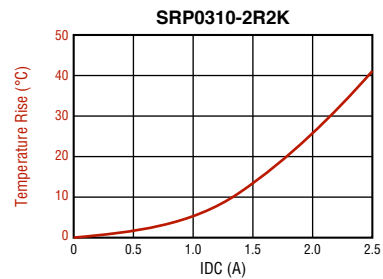
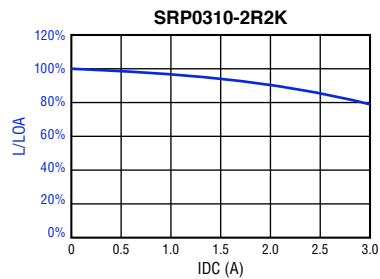
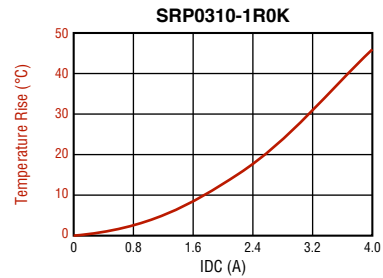
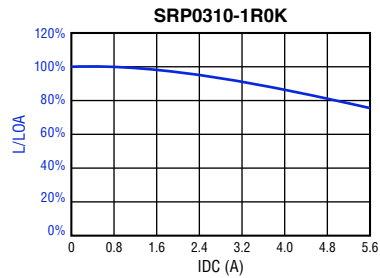
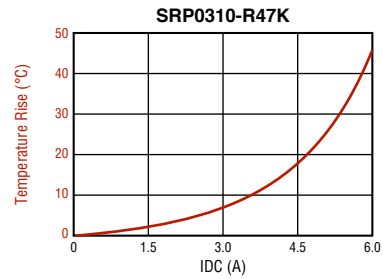
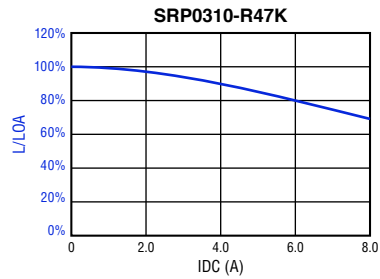
\*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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# SRP0310 Series - Shielded Power Inductors

**BOURNS®**

## L vs. I Charts



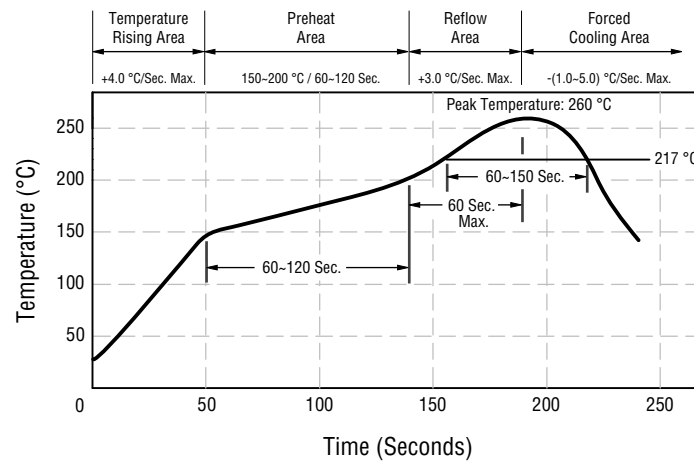
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Soldering Profile

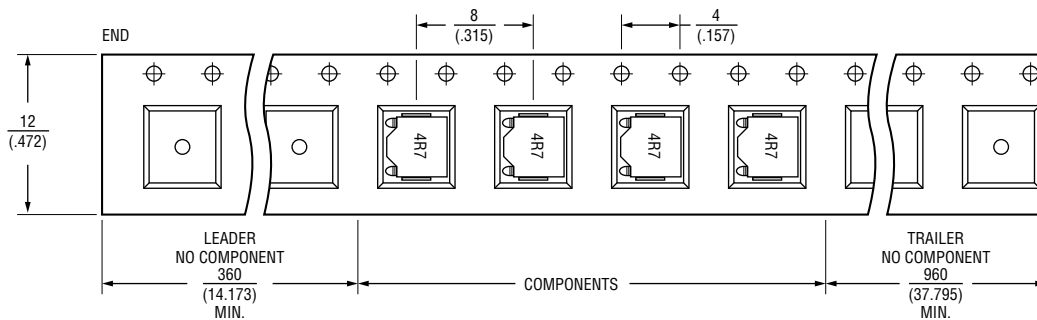
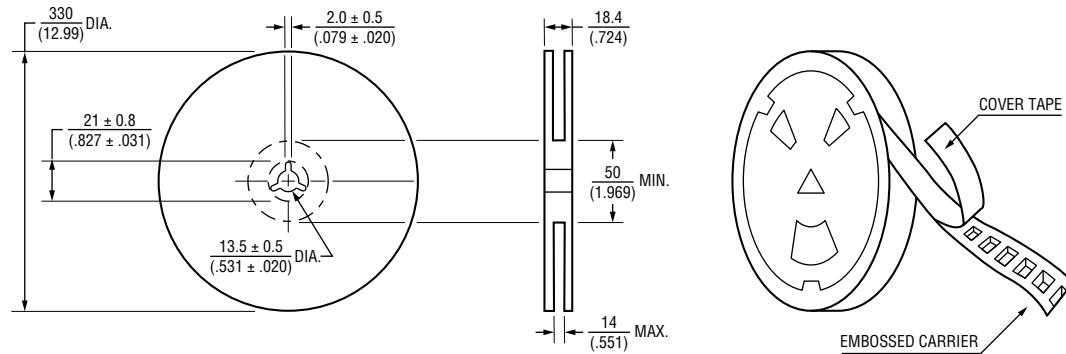
Peak Temperature: 260 °C max.  
 Max. Peak Temperature -5 °C: 30 sec. max.  
 Max. Time Above 217 °C: 60~150 sec. max.



# SRP0310 Series - Shielded Power Inductors

**BOURNS®**

## Packaging Specifications



USER DIRECTION OF FEED →

QTY: 4,000 PCS PER REEL

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

**BOURNS®**

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REV. 04/21

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