

## Features

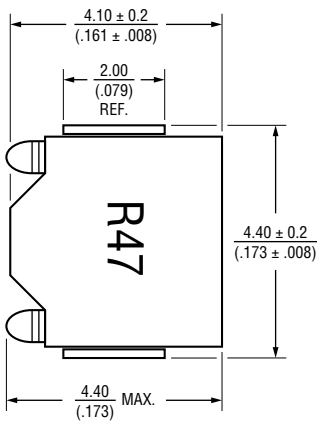
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Flat wire
- RoHS compliant\* and halogen free\*\*

## SRP0410 Series - Shielded Power Inductors

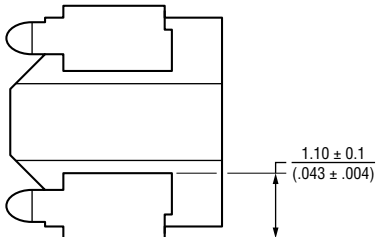
### Electrical Specifications @ 25 °C

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. (%)							
SRP0410-R47K	0.47	10	21	25.2	82	29.0	35.3	5.2	9.2
SRP0410-R68K	0.68	10	16	25.2	71	29.5	36.0	5.2	7.0
SRP0410-1R0K	1.00	10	20	7.96	52	37.5	42.5	4.5	5.3
SRP0410-1R5K	1.50	10	35	7.96	40	56.0	64.0	3.9	4.8
SRP0410-2R2K	2.20	10	22	7.96	33	75.0	87.0	3.0	3.9
SRP0410-3R3K	3.30	10	20	7.96	29	100.0	120.0	2.4	3.3
SRP0410-4R7K	4.70	10	21	7.96	26	180.0	210.0	1.9	2.8
SRP0410-6R8K	6.80	10	12	7.96	20	201.0	245.0	1.8	2.1
SRP0410-100K	10.0	10	20	2.52	16	298.0	350.0	1.4	1.7

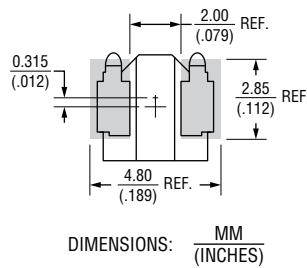
### Product Dimensions



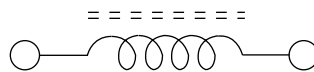
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$



### 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

**SRP0410 - 4R7K**

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

\* 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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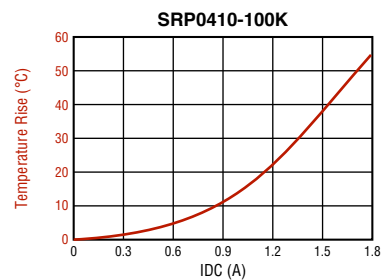
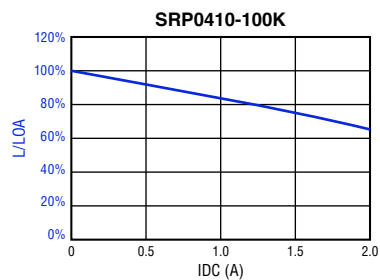
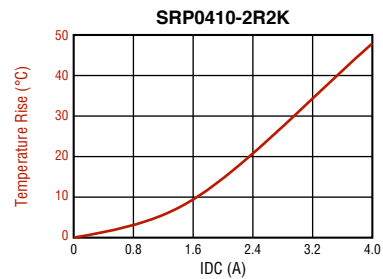
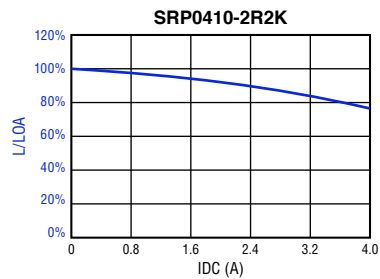
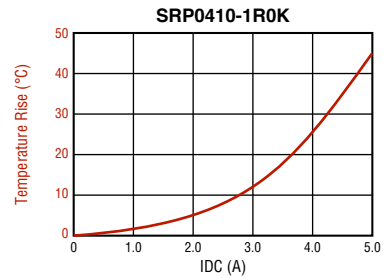
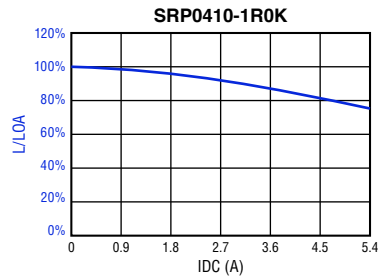
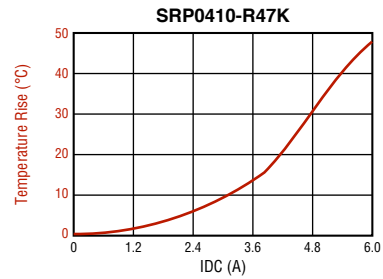
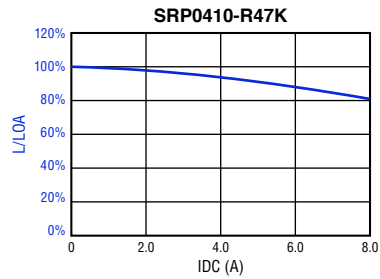


**WARNING**  
**Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

# SRP0410 Series - Shielded Power Inductors

**BOURNS®**

## L vs. I Charts



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Soldering Profile

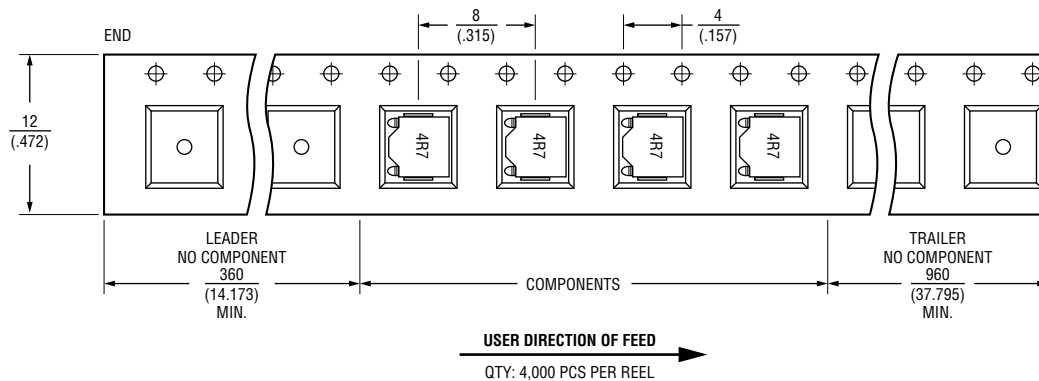
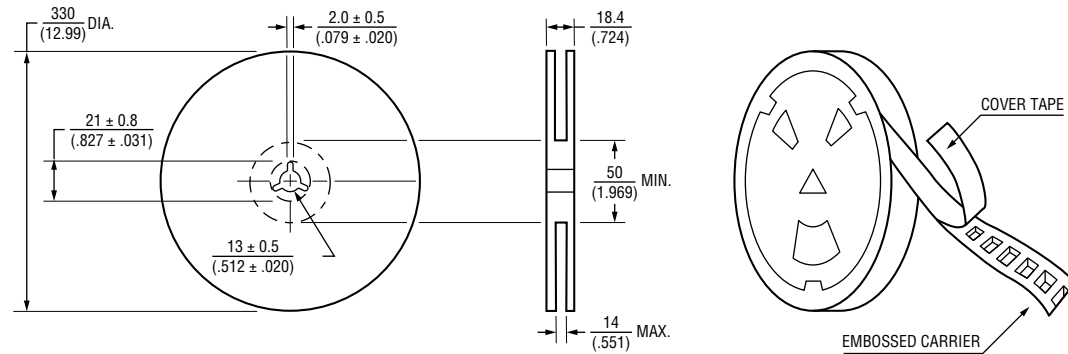
Peak Temperature: 260 °C max.  
 Max. Peak Temperature -5 °C: 30 sec. max.  
 Max. Time Above 217 °C: 60~150 sec. max.



# SRP0410 Series - Shielded Power Inductors

**BOURNS®**

## Packaging Specifications



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

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