

### Features

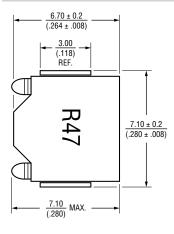
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Flat wire
- RoHS compliant\* and halogen free\*\*

## **SRP0612 Series - Shielded Power Inductors**

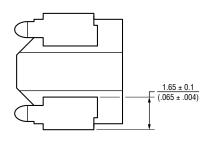
### Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 kHz / 1 V		Q Typ.	Q Test Freq,	SRF (MHz)	DCR (mΩ)	DCR (mΩ)	Irms (A)	Isat (A)
	L (µH)	Tol. (%)	Typ.	(MHz)	Тур.	Тур.	Max.	Тур.	Тур.
SRP0612-R47K	0.47	10	21	25.2	68	14.8	17.1	7.7	15.5
SRP0612-R68K	0.68	10	21	25.2	55	20.0	22.3	7.0	15.0
SRP0612-1R0K	1.00	10	54	7.96	42	23.8	27.5	6.2	12.0
SRP0612-1R5K	1.50	10	42	7.96	22	28.5	32.8	6.0	9.0
SRP0612-2R2K	2.20	10	22	7.96	32	33.2	38.8	5.5	7.0
SRP0612-3R3K	3.30	10	28	7.96	18	43.1	50.0	5.0	5.5
SRP0612-4R7K	4.70	10	32	7.96	15	70.0	82.0	3.9	5.0
SRP0612-6R8K	6.80	10	29	7.96	14	107.0	125.0	3.0	4.0
SRP0612-100K	10.0	10	26	2.52	10	135.0	157.0	2.7	3.0

### **Product Dimensions**





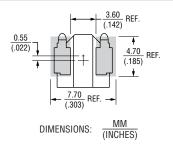


**Cancer and Reproductive Harm** 

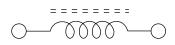
www.P65Warnings.ca.gov

WARNING

### 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 Isat
Temperature Rise 40 °C at rated Irms <sup>1</sup>
Rated Voltage50 V
Moisture Sensitivity Level1
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 2500	pcs. per 13-inch reel

Please consult <u>Bourns<sup>®</sup> Model SRP-A</u> <u>Series Visual Inspection Guide</u> for detailed construction, processing and testing information.

#### How to Order

Model —— Value Code

	SRP0612 - 4F	17K
(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. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last pace of this document. and at www.bourns.com/docs/legal/disclaimer.pdf.

## **SRP0612 Series - Shielded Power Inductors**

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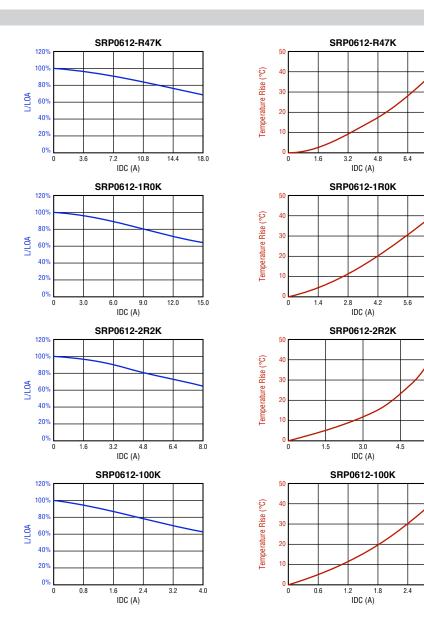
8.0

7.0

6.0

3.0

L vs. I Charts



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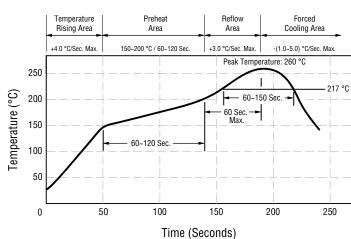
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# **SRP0612 Series - Shielded Power Inductors**

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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.

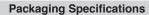
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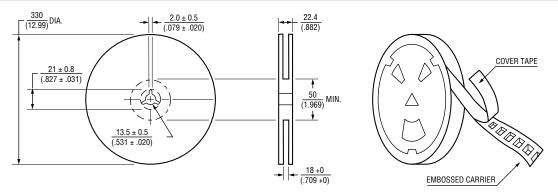
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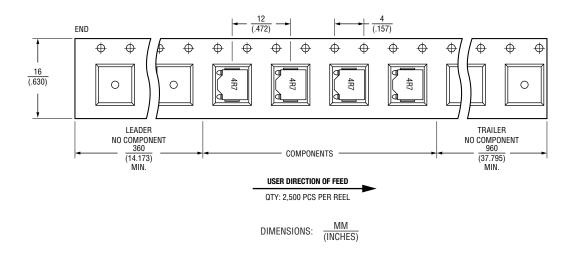
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## **SRP0612 Series - Shielded Power Inductors**

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