

Features

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

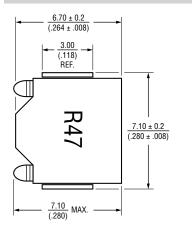
BOURNS

SRP0612 Series - Shielded Power Inductors

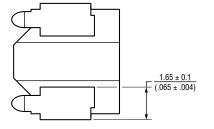
Electrical Specifications @ 25 °C

| 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. (%) | ıyρ. | (MHz) | Тур. | Тур. | Max. | Typ. | 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 |

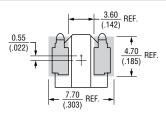
Product Dimensions





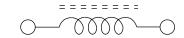


Recommended Layout



DIMENSIONS:

Electrical Schematic



Additional Information

Click these links for more information:











INVENTORY SAMPLES

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 Irms1 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 WireEnameled copper Terminal FinishSn Packaging..... 2500 pcs. per 13-inch reel

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

How to Order

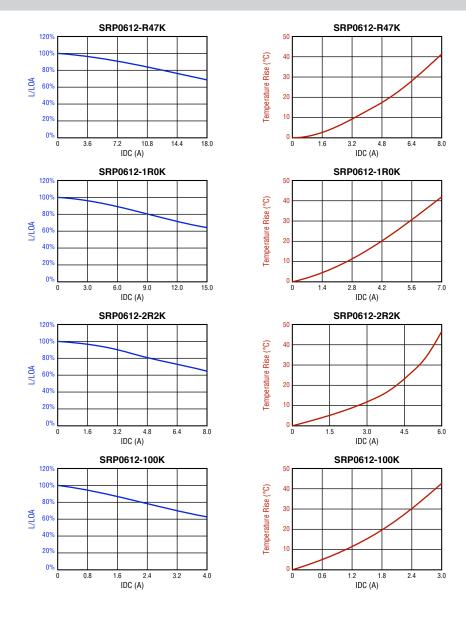
SRP0612 - 4R7K

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 (CI) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (CI) 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 page of this document, and at www.bourns.com/docs/legal/dis

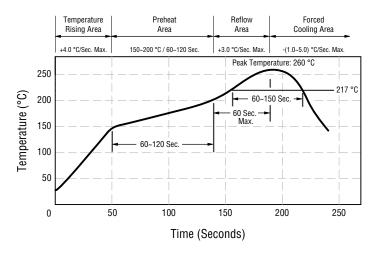


L vs. I Charts



Soldering Profile

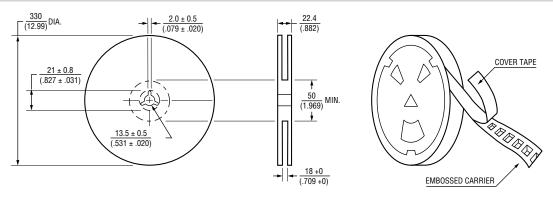
Peak Temperature: 260 °C max. Max. Peak Temperature -5 °C: 30 sec. max. Max. Time Above 217 °C: 60~150 sec. max.

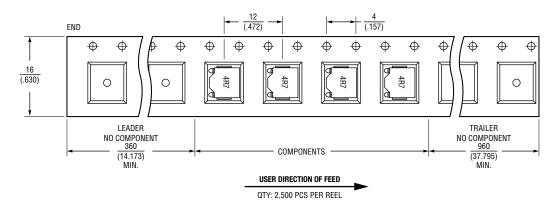


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Packaging Specifications





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

BOURNS®

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com

The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

www.bourns.com

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