



Features

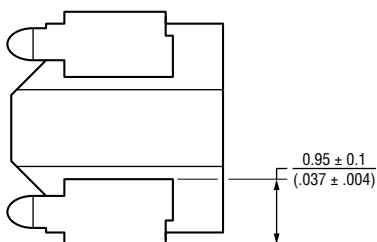
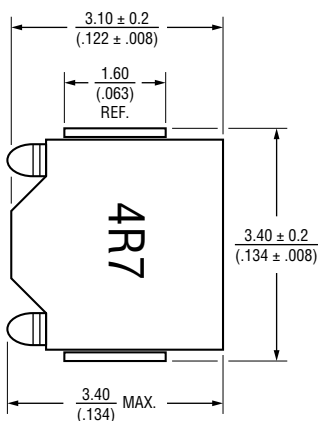
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Flat wire
- RoHS compliant* and halogen free**

SRP0312 Series - Shielded Power Inductors

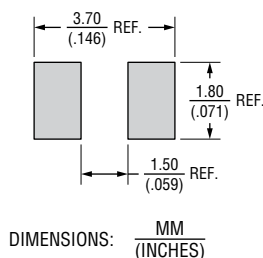
Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 kHz / 1 V		Q Typ.	Q Test Freq. (MHz)	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	I _{rms} (A) Typ.	I _{sat} (A) Typ.
	L (μH)	Tol. (%)							
SRP0312-R47K	0.47	10	18	25.2	91	15.3	17.8	6.6	8.0
SRP0312-R68K	0.68	10	14	25.2	77	21.2	24.8	5.6	6.0
SRP0312-1R0K	1.00	10	23	7.96	59	29.0	34.0	4.7	5.0
SRP0312-1R5K	1.50	10	28	7.96	45	49.0	58.0	3.6	4.3
SRP0312-2R2K	2.20	10	28	7.96	38	63.5	74.0	3.1	3.7
SRP0312-3R3K	3.30	10	22	7.96	36	110.0	129.0	2.4	3.0
SRP0312-4R7K	4.70	10	22	7.96	29	175.0	210.0	1.9	2.5

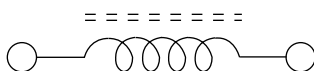
Product Dimensions



Recommended Layout



Electrical Schematic



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_{sat}
Temperature Rise ... 40 °C at rated I_{rms}¹
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

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

How to Order

SRP0312 - 4R7K

Model _____
Value Code (see table) _____



WARNING Cancer and Reproductive Harm www.P65Warnings.ca.gov

* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

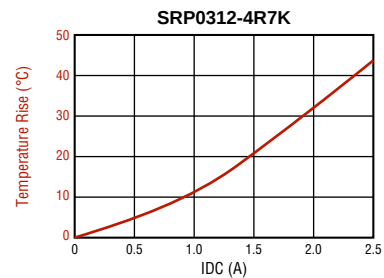
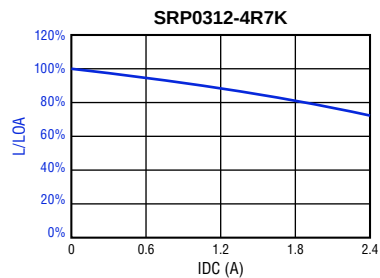
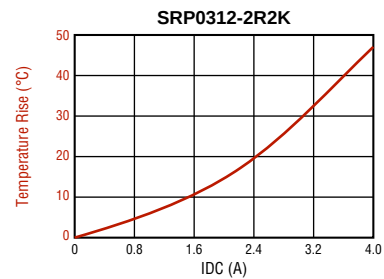
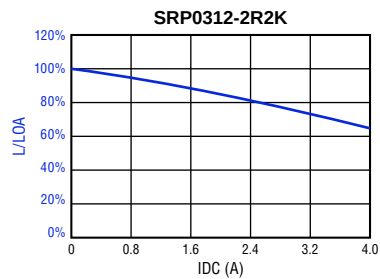
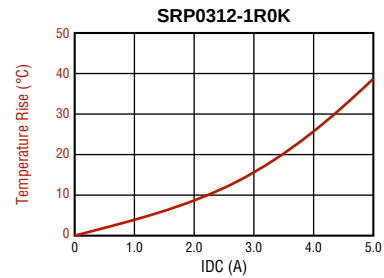
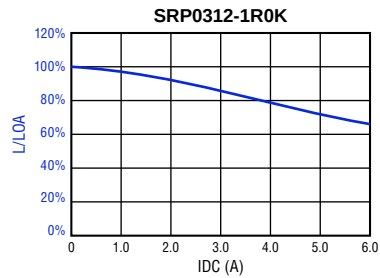
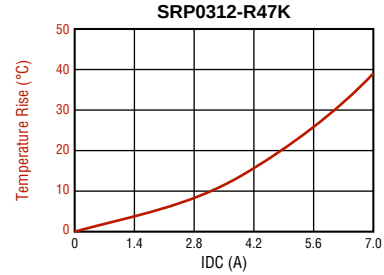
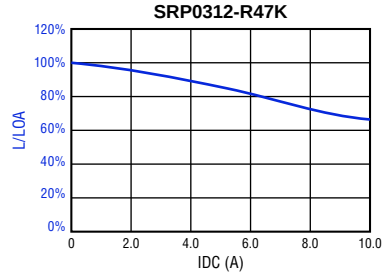
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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SRP0312 Series - Shielded Power Inductors

BOURNS®

L vs. I Charts



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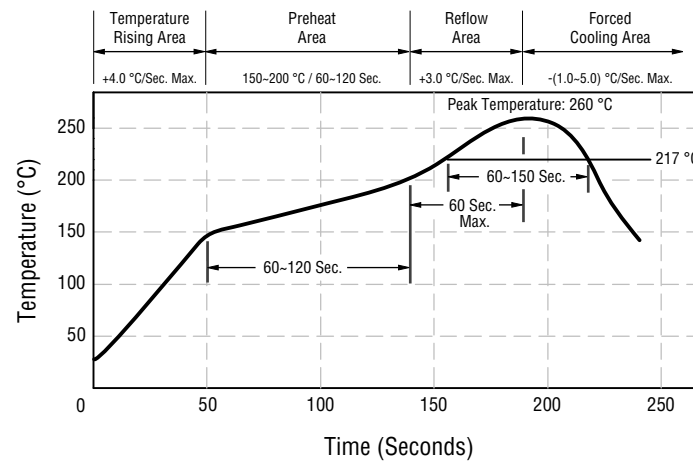
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SRP0312 Series - Shielded Power Inductors

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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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BOURNS®

Technical drawing of a 35mm film cartridge showing front, side, and end views with dimensions in inches and millimeters.

Front View Dimensions:

- Overall Diameter: 330 (12.99) DIA.
- Inner Diameter: 13.5 ± 0.5 (.531 $\pm$.020) DIA.
- Distance from Center to Top Edge: 21 ± 0.8 (.827 $\pm$.031)
- Distance from Center to Bottom Edge: 2.0 ± 0.5 (.079 $\pm$.020)

Side View Dimensions:

- Overall Width: 18.4 (.724)
- Minimum Thickness: 50 (1.969) MIN.
- Maximum Thickness: 14 (.551) MAX.

End View:

- Labels: COVER TAPE, EMBOSSED CARRIER



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