



Features

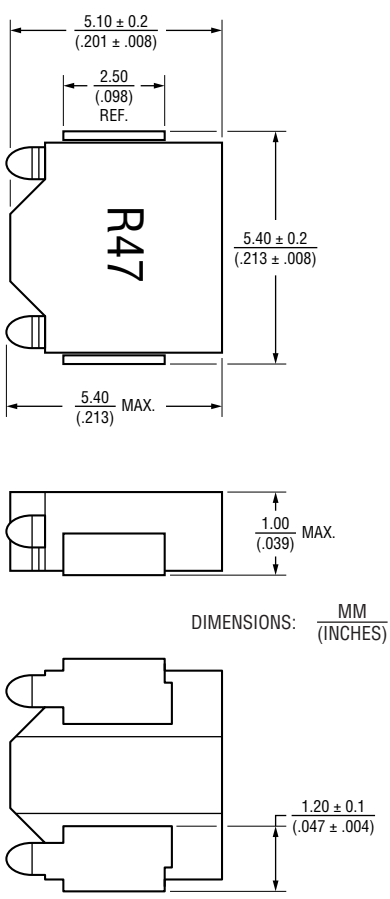
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Flat wire
- RoHS compliant* and halogen free**

SRP0510 Series - Shielded Power Inductors

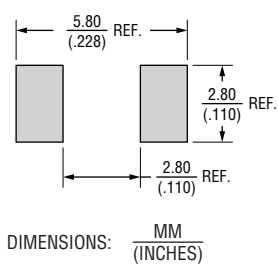
Electrical Specifications @ 25 °C

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. (%)							
SRP0510-R47K	0.47	10	21	25.2	89	32.5	38.0	5.0	10.5
SRP0510-R68K	0.68	10	19	25.2	72	37.0	43.5	4.6	8.5
SRP0510-1R0K	1.00	10	41	7.96	51	48.0	57.0	4.0	8.0
SRP0510-1R5K	1.50	10	41	7.96	40	55.0	65.0	3.6	6.5
SRP0510-2R2K	2.20	10	39	7.96	27	63.0	75.0	3.4	5.0
SRP0510-3R3K	3.30	10	33	7.96	21	89.0	104.0	2.8	4.6
SRP0510-4R7K	4.70	10	25	7.96	21	128.0	151.0	2.4	3.6
SRP0510-6R8K	6.80	10	18	7.96	16	167.5	198.0	2.2	3.0
SRP0510-100K	10.0	10	24	2.52	15	290.0	335.0	1.6	2.1

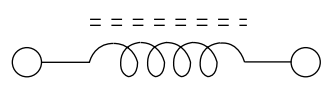
Product Dimensions



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 Voltage50 V

Moisture Sensivity 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

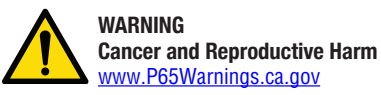
Packaging 4000 pcs. per 13-inch reel

How to Order

SRP0510 - 4R7K

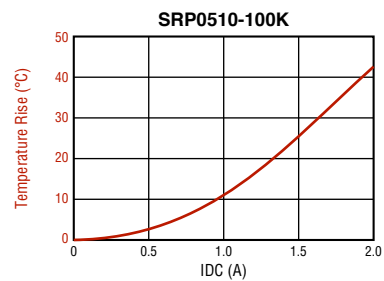
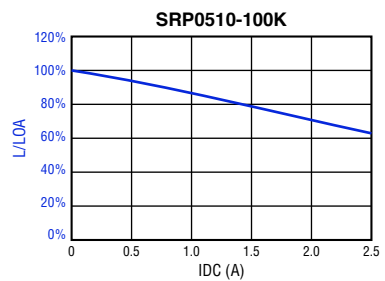
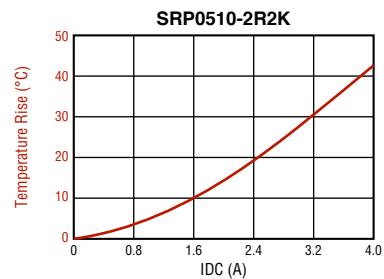
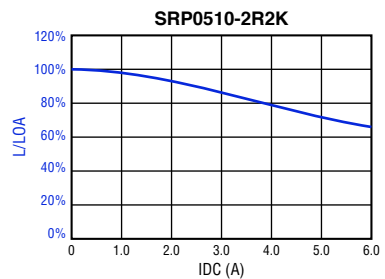
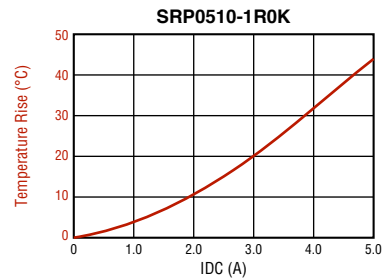
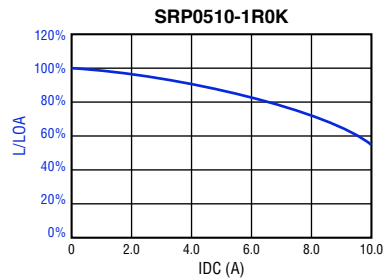
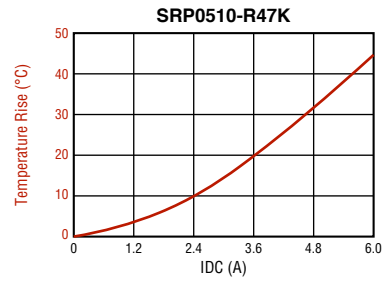
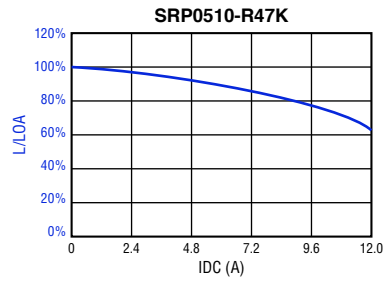
Model _____

Value Code (see table) _____



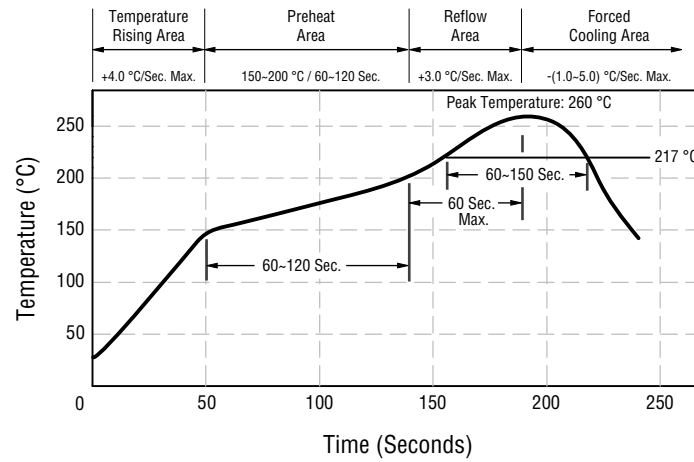
* RoHS Directive 2015/863, Mar 31, 2015 and Annex.
 ** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.
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L vs. I Charts



Soldering Profile

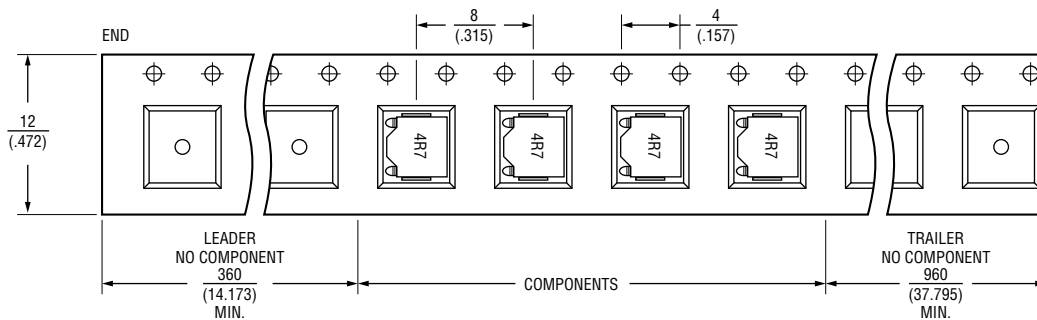
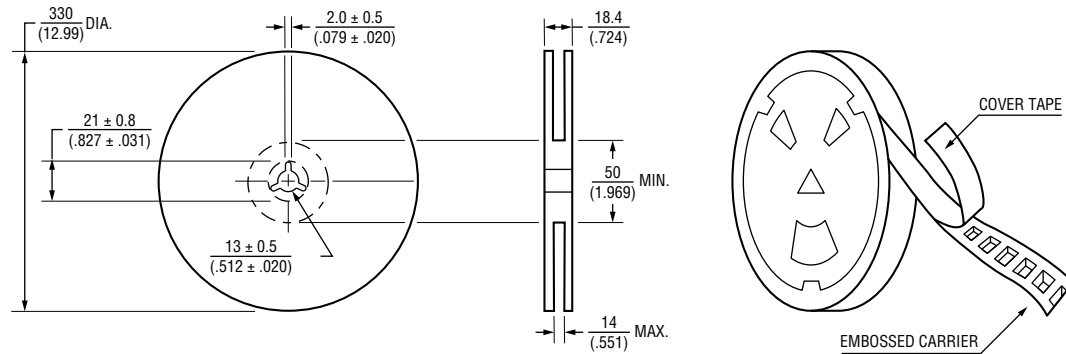
Peak Temperature: 260 °C max.
 Max. Peak Temperature -5 °C: 30 sec. max.
 Max. Time Above 217 °C: 60~150 sec. max.



SRP0510 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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