Features

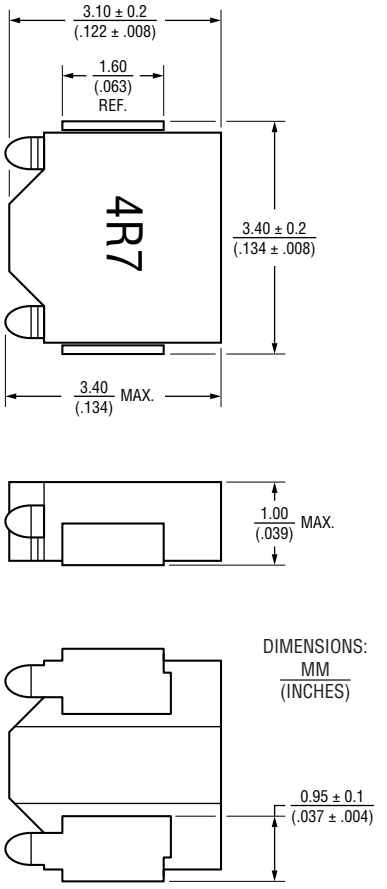
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Flat wire
- RoHS compliant* and halogen free**

SRP0310 Series - Shielded Power Inductors

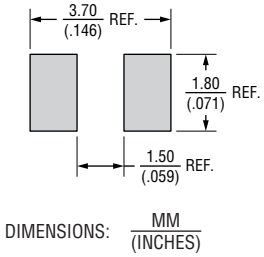
Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 kHz / 1 V		Q Typ.	Q Test Freq, (MHz)	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	Irms (A) Typ.	Isat (A) Typ.
	L (μH)	Tol. (%)							
SRP0310-R47K	0.47	10	18	25.2	90	22.5	26.5	5.6	7.0
SRP0310-R68K	0.68	10	18	25.2	70	30.5	35.5	4.6	6.0
SRP0310-1R0K	1.00	10	16	7.96	64	49.0	58.5	3.4	5.6
SRP0310-1R5K	1.50	10	16	7.96	56	88.0	105.0	2.4	4.2
SRP0310-2R2K	2.20	10	16	7.96	40	99.5	118.0	2.3	2.7
SRP0310-3R3K	3.30	10	12	7.96	32	135.0	160.0	2.1	2.2
SRP0310-4R7K	4.70	10	18	7.96	25	183.0	215.0	1.8	2.1

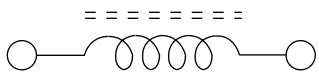
Product Dimensions



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 Isat
Temperature Rise ... 40 °C at rated Irms[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

How to Order

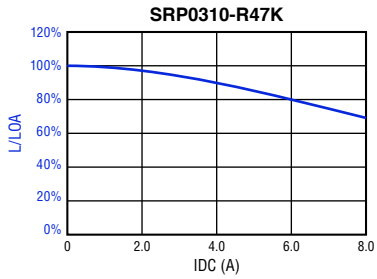
SRP0310 - 4R7K

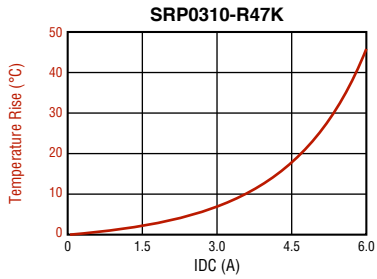
Model
Value Code (see table)

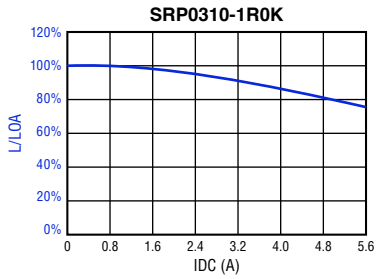
WARNING Cancer and Reproductive Harm www.P65Warnings.ca.gov

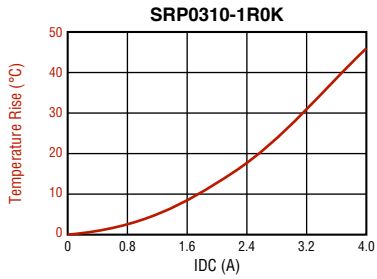
* RoHS Directive 2015/863, Mar 31, 2015 and Annex.
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

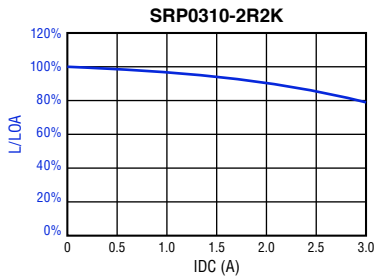
L vs. I Charts

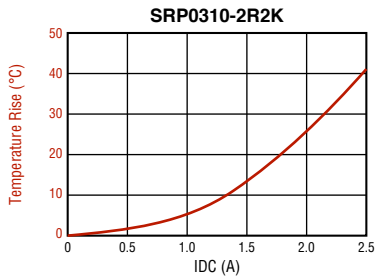


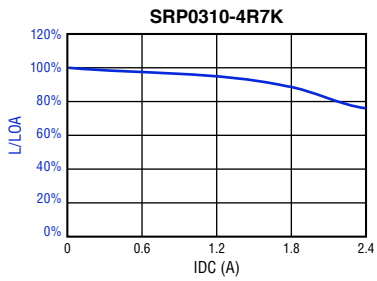


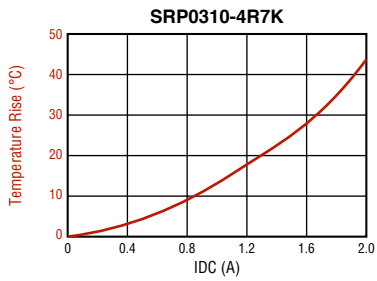






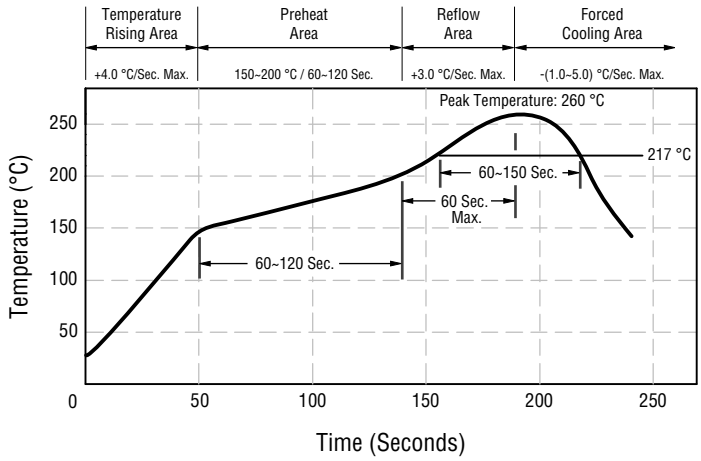




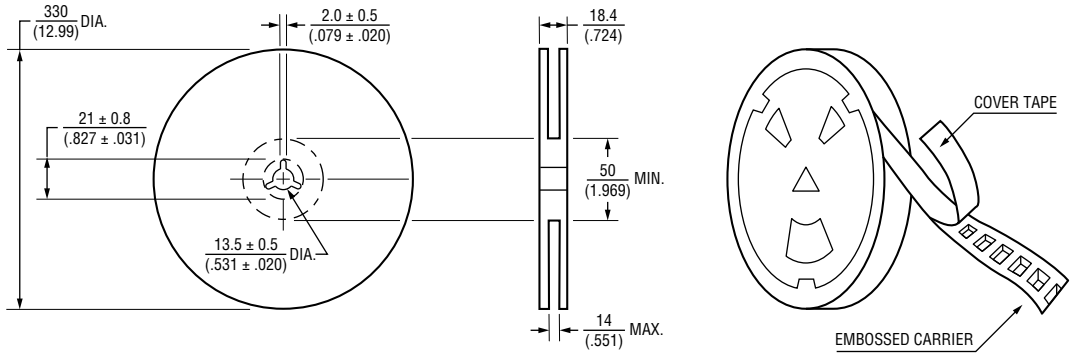


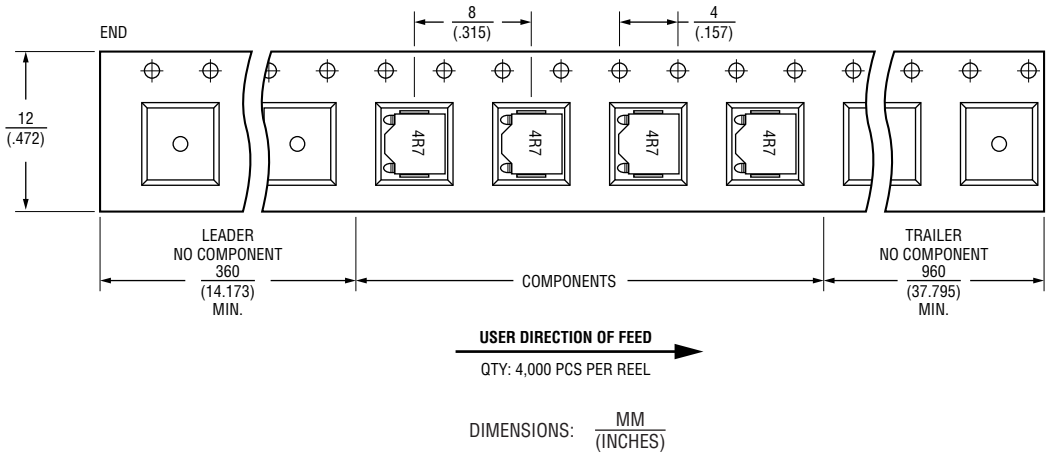
Soldering Profile

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



Packaging Specifications





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REV. 05/20

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