

Features

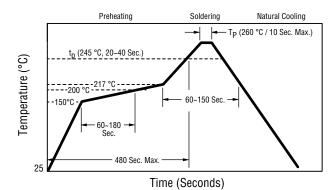
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Inductance range: 0.47 to 47 µH
- RoHS compliant* and halogen free**

SRP1770C Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

	Inductance @ 100 kHz / 1 V		Q (Min.)	SRF	DCR	DCR	Irms	Isat	
Bourns Part Number	L (<i>µ</i> H)	Tol. (%)	@100 kHz /1 V	(MHz) Typ.	(mΩ) Typ.	(mΩ) Max.	(A) Typ.	(A) Typ.	Terminal Type
SRP1770C-R47M	0.47	± 20	10	28	0.75	0.83	60.0	115	
SRP1770C-1R0M	1.0	± 20	20	24	1.30	1.50	48.0	68	
SRP1770C-1R5M	1.5	± 20	20	22	1.80	2.10	42.0	55	
SRP1770C-2R2M	2.2	± 20	20	21	2.50	2.80	40.0	45	
SRP1770C-3R3M	3.3	± 20	20	19	3.50	3.90	28.0	40	
SRP1770C-4R7M	4.7	± 20	20	17	4.80	5.50	26.0	37	
SRP1770C-5R6M	5.6	± 20	20	15	5.90	6.80	24.0	35	Lead
SRP1770C-6R8M	6.8	± 20	20	14	8.40	9.20	22.0	30	Frame
SRP1770C-8R2M	8.2	± 20	20	13	9.60	10.80	18.0	28	
SRP1770C-100M	10.0	± 20	20	12	11.60	13.00	17.0	25	
SRP1770C-150M	15.0	± 20	20	10	16.50	19.50	14.0	23	
SRP1770C-220M	22.0	± 20	20	8	24.00	27.60	12.0	19	
SRP1770C-330M	33.0	± 20	20	6	36.00	42.00	10.7	15	
SRP1770C-470M	47.0	± 20	20	7	46.00	53.00	8.7	13	

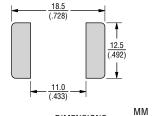
Soldering Profile



Reflow Times: 3 Times Max.

How to Order SRP1770C - 220M

Recommended Layout



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



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

- RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
- **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.

General Specifications

Operating Temperature

.....-40 °C to +125 °C (Temperature rise included)

Storage Temperature (Component)-40 °C to +125 °C

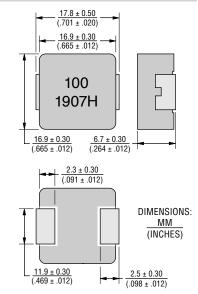
Rated Current

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

CoreMetal alloy powder WireEnameled copper Terminal FinishSn/Ni Packaging200 pcs. per 13-inch reel

Product Dimensions



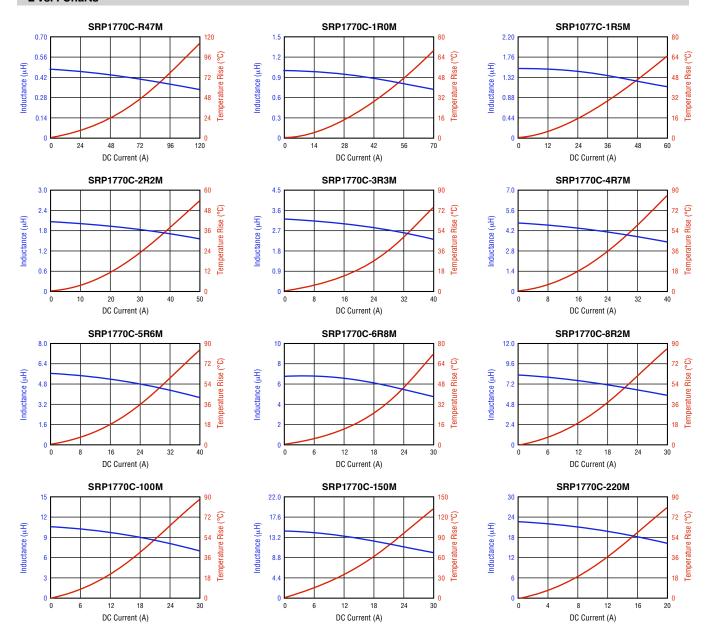
Schematic



SRP1770C Series - Shielded Power Inductors

BOURNS

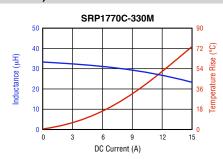
L vs. I Charts

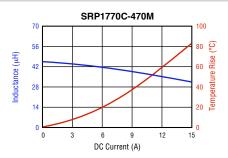


SRP1770C Series - Shielded Power Inductors

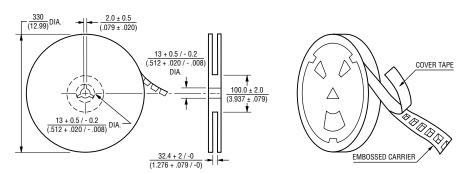
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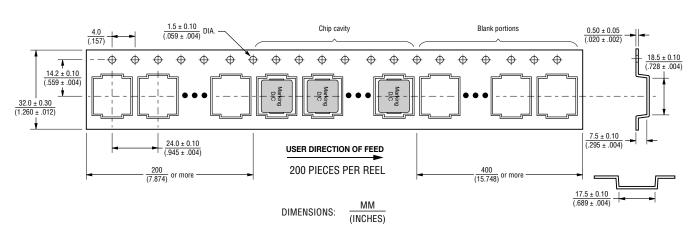
L vs. I Charts (Continued)





Packaging Specifications





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