



Features

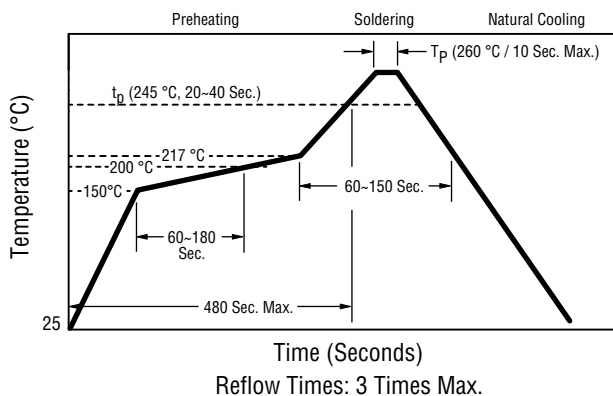
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Inductance range: 0.47 to 47 μ H
- RoHS compliant* and halogen free**

SRP1770C Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 kHz / 1 V		Q (Min.) @ 100 kHz / 1 V	SRF (MHz) Typ.	DCR (m Ω) Typ.	DCR (m Ω) Max.	I _{rms} (A) Typ.	I _{sat} (A) Typ.	Terminal Type
	L (μ H)	Tol. (%)							
SRP1770C-R47M	0.47	± 20	10	28	0.75	0.83	60.0	115	Lead Frame
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	
SRP1770C-6R8M	6.8	± 20	20	14	8.40	9.20	22.0	30	
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

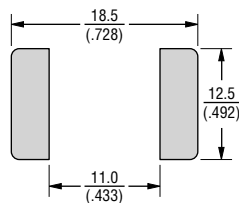


How to Order

SRP1770C - 220M

Model _____
Value Code (see table) _____

Recommended Layout



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

General Specifications

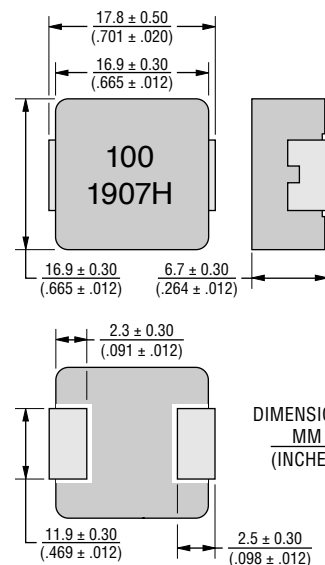
Operating Temperature -40 °C to +125 °C
(Temperature rise included)
Storage Temperature (Component) -40 °C to +125 °C
Rated Current Inductance drops 30 % at I_{sat}
Temperature Rise 40 °C at rated I_{rms}
Moisture Sensitivity Level 1
ESD Classification (HBM) N/A

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.

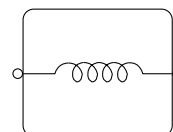
Materials

Core Metal alloy powder
Wire Enameled copper
Terminal Finish Sn/Ni
Packaging 200 pcs. per 13-inch reel

Product Dimensions



Schematic



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.

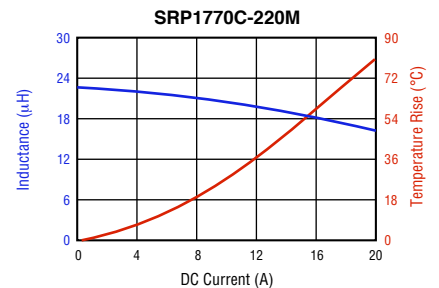
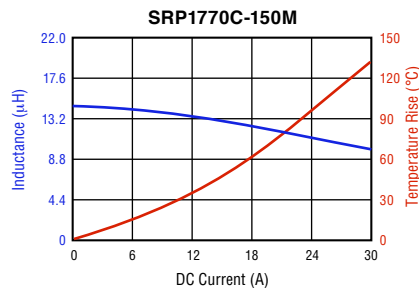
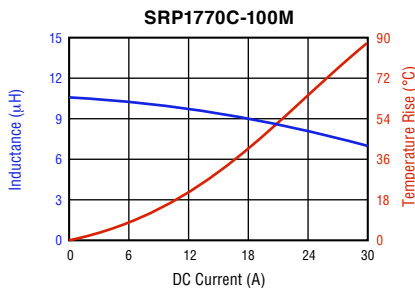
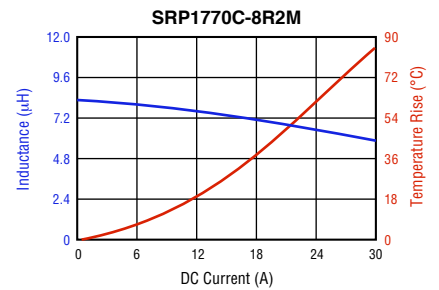
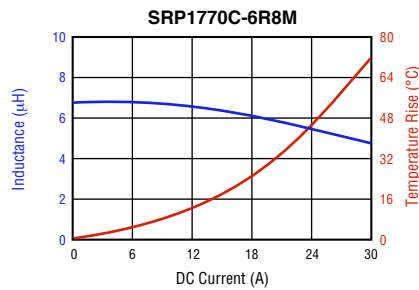
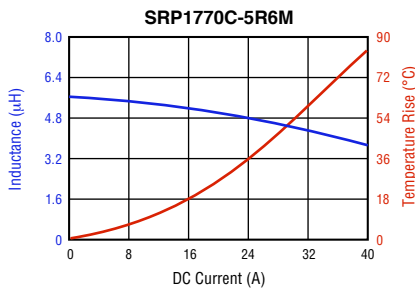
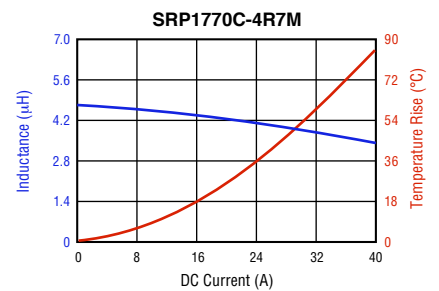
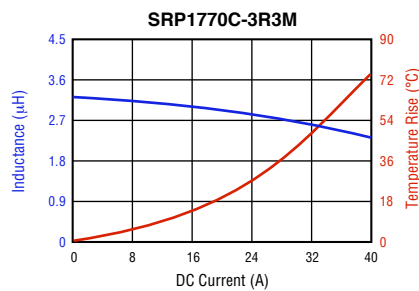
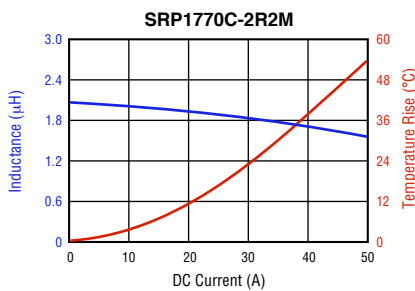
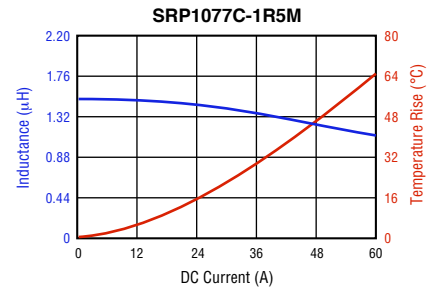
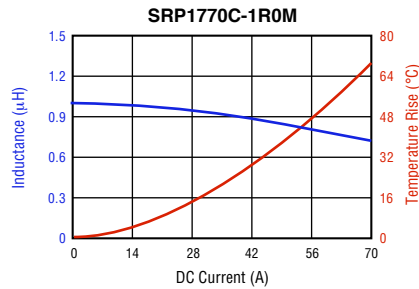
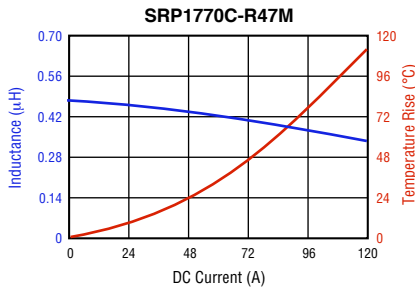
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SRP1770C Series - Shielded Power Inductors

BOURNS®

L vs. I Charts



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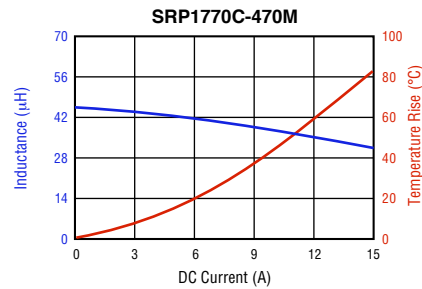
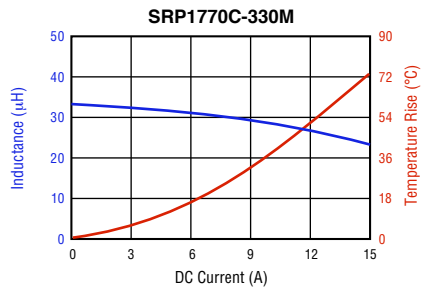
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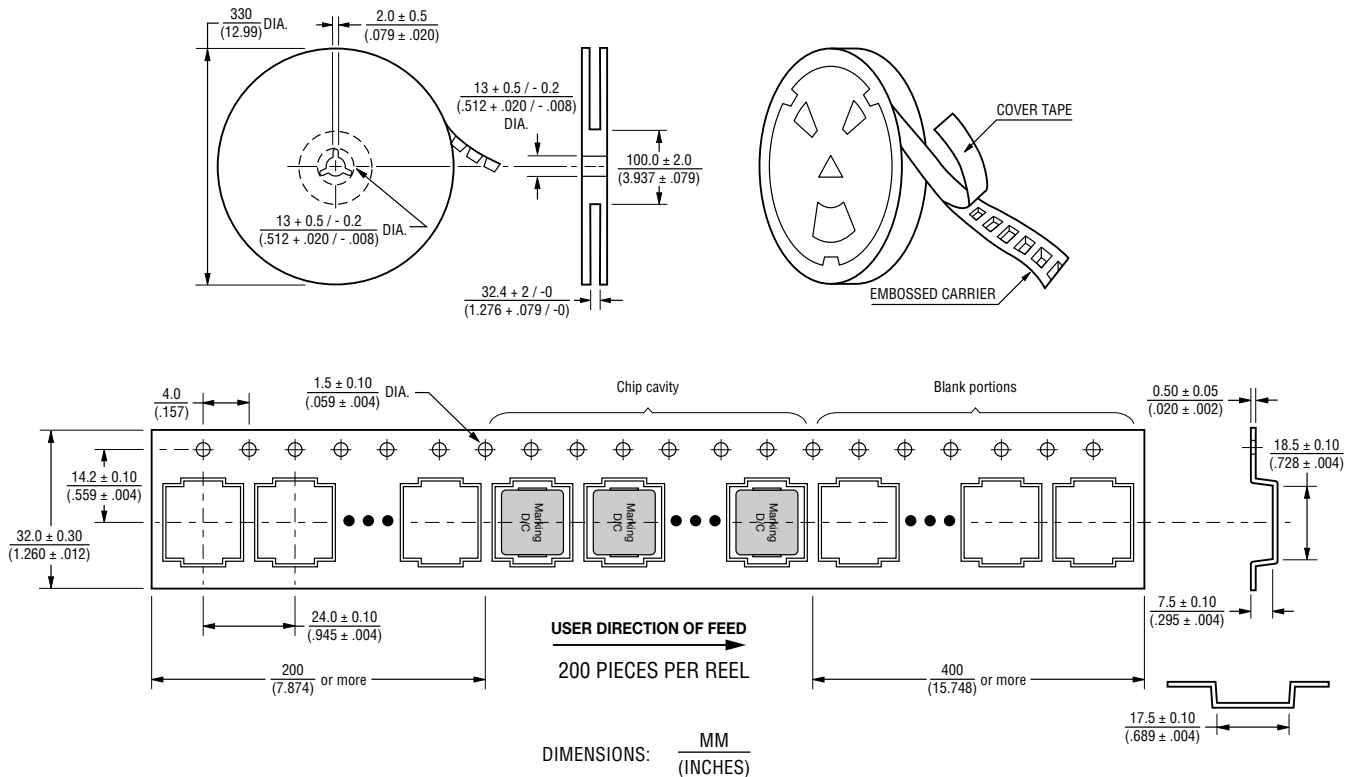
SRP1770C Series - Shielded Power Inductors

BOURNS®

L vs. I Charts (Continued)



Packaging Specifications



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

www.bourns.com

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Users should verify actual device performance in their specific applications.

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