



### Features

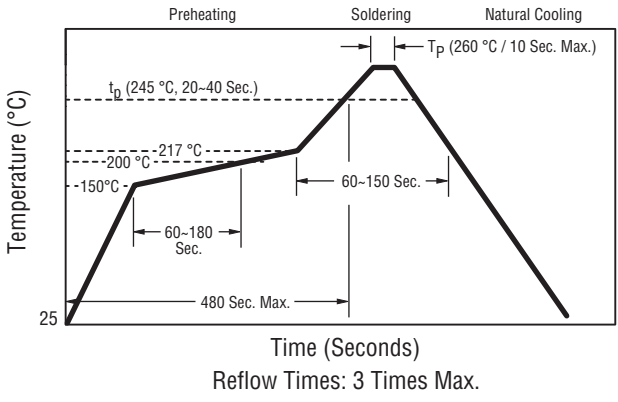
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Inductance range: 0.47 to 47  $\mu$ H
- RoHS compliant\* and halogen free\*\*

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

### Soldering Profile

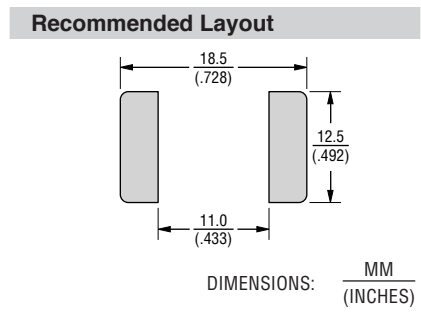


**How to Order**

**SRP1770C - 220M**

Model \_\_\_\_\_

Value Code (see table) \_\_\_\_\_



### General Specifications

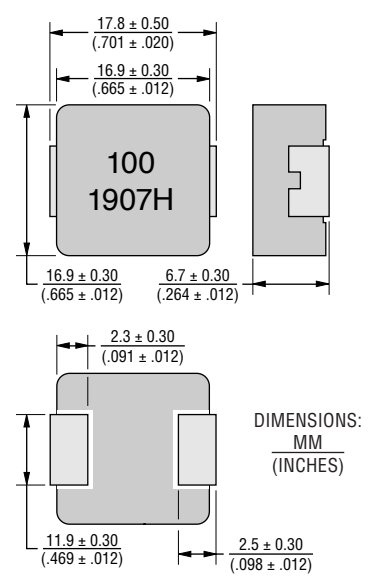
Operating Temperature .....-40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature (Component) .....-40 °C to +125 °C  
 Rated Current ..... Inductance drops 30 % at I<sub>sat</sub>  
 Temperature Rise .....40 °C at rated I<sub>rms</sub>  
 Moisture Sensitivity Level ..... 1  
 ESD Classification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

<sup>1</sup> 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.

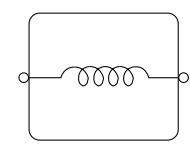
### Materials

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

### Product Dimensions



### Schematic



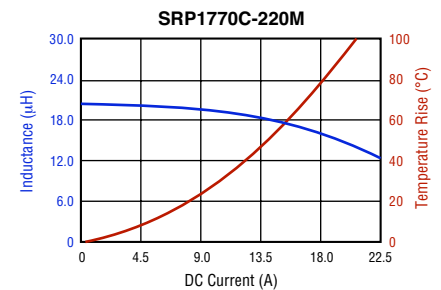
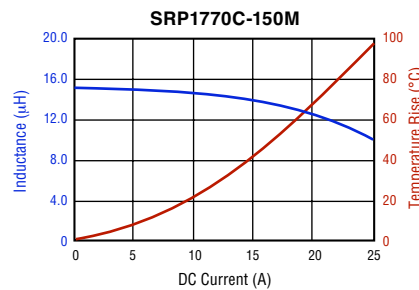
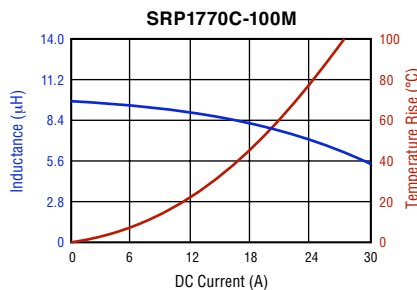
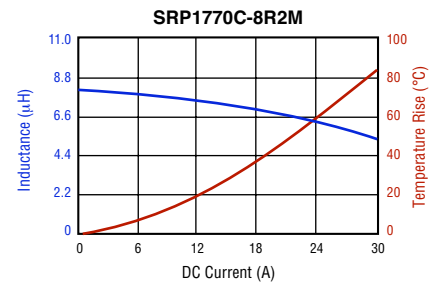
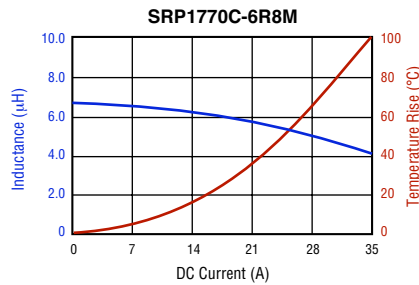
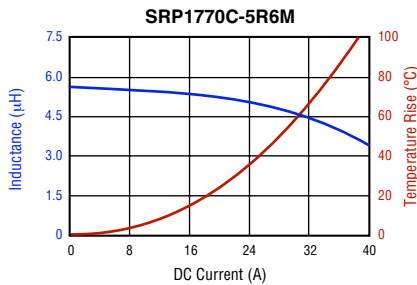
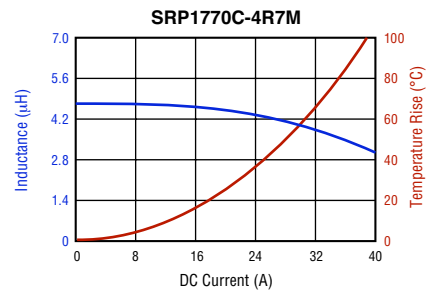
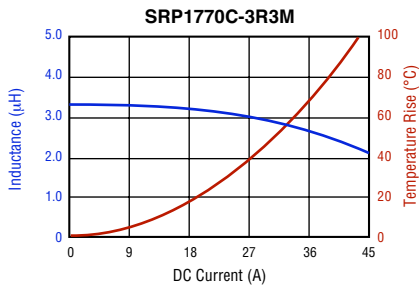
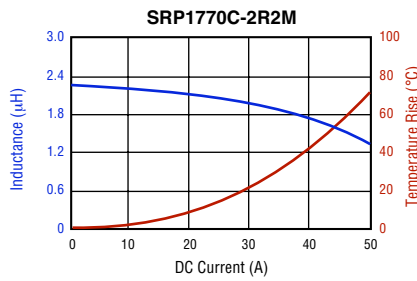
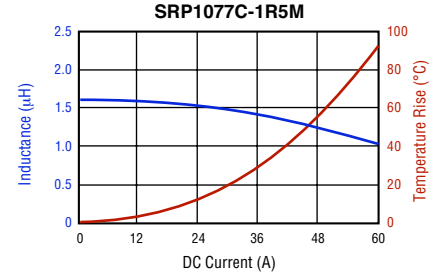
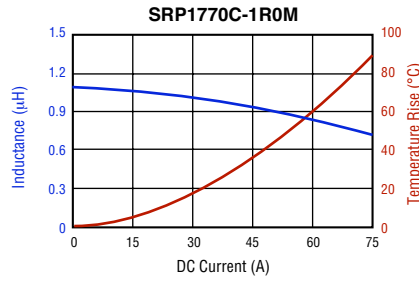
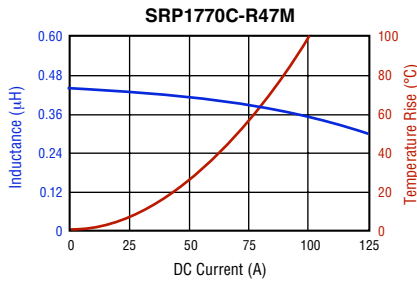
**WARNING** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\* 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.  
 Specifications are subject to change without notice. Users should verify actual device performance in their specific applications.  
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# SRP1770C Series - Shielded Power Inductors

**BOURNS®**

## L vs. I Charts



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Users should verify actual device performance in their specific applications.

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