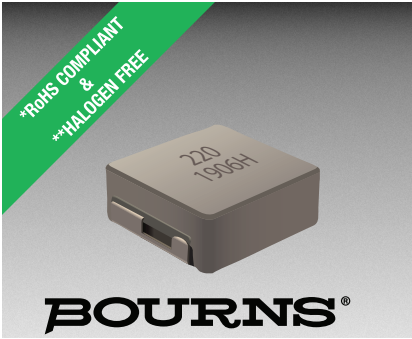




**THE DATASHEET OF
SRP1770C-330M**





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**



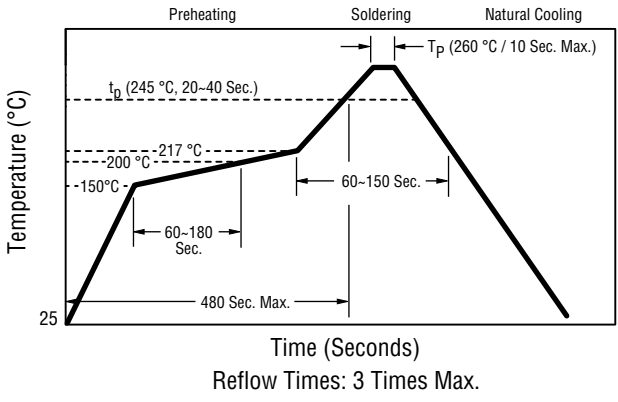
This series is currently available but not recommended for new designs.

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 | 5 | 46.00 | 53.00 | 8.7 | 13 | |

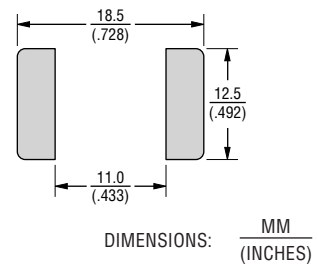
Soldering Profile



How to Order

SRP1770C - 220M
 Model _____
 Value Code (see table) _____

Recommended Layout



General Specifications

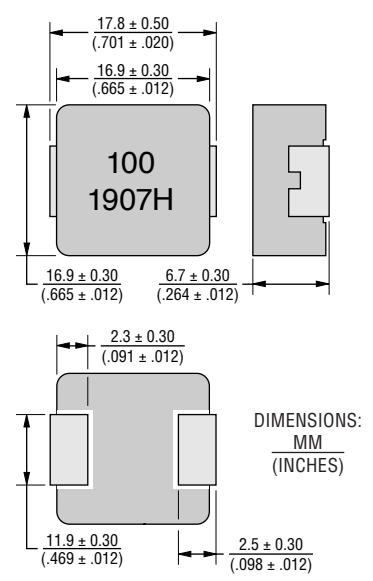
Operating Temperature-40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature (Component)-40 °C to +125 °C
 Rated Current Inductance drops 30 % at I_{sat}
 Temperature Rise40 °C at rated I_{rms}
 Moisture Sensitivity Level 1
 ESD Classification (HBM) N/A

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.

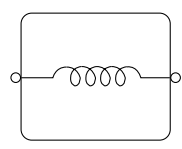
Materials

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

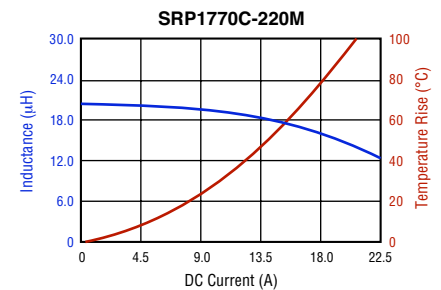
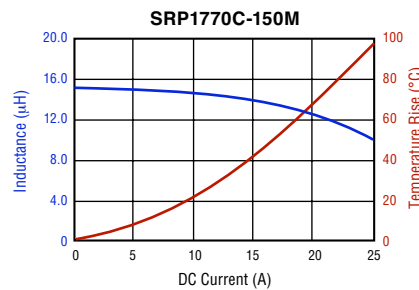
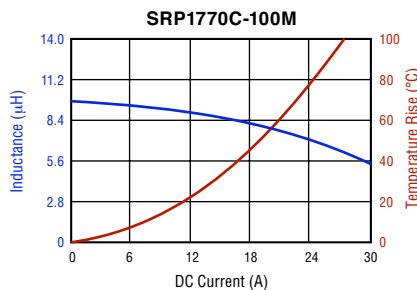
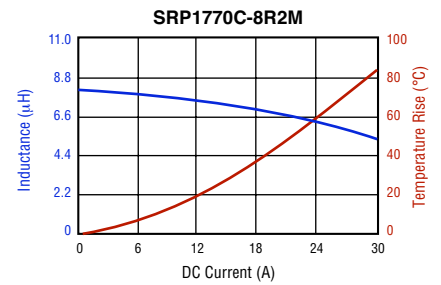
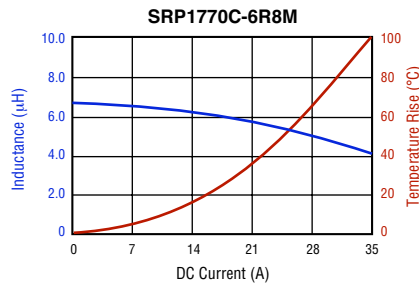
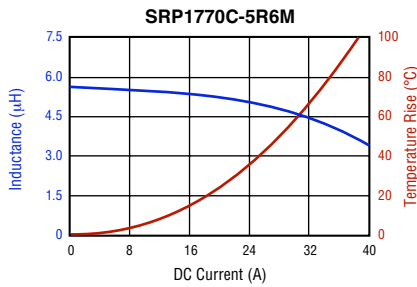
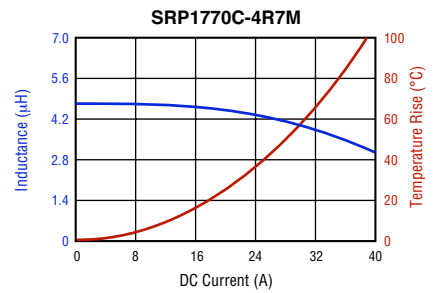
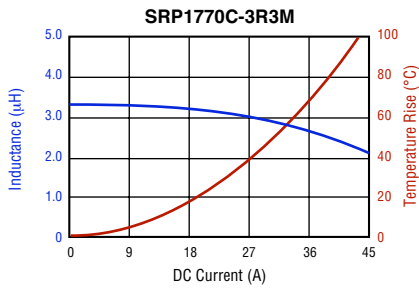
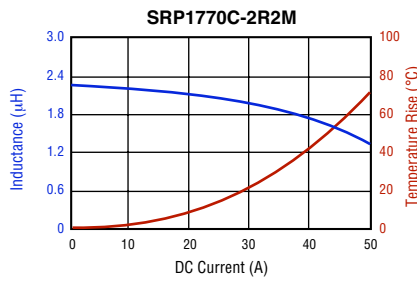
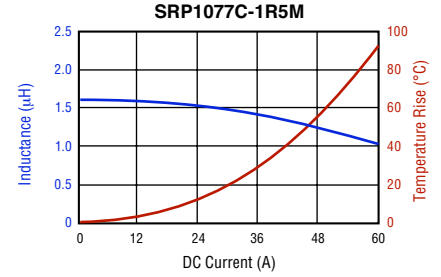
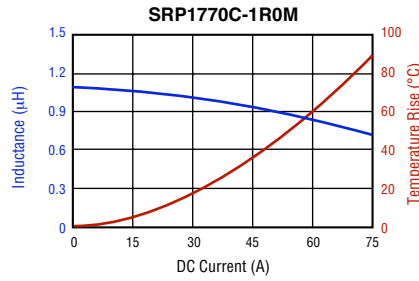
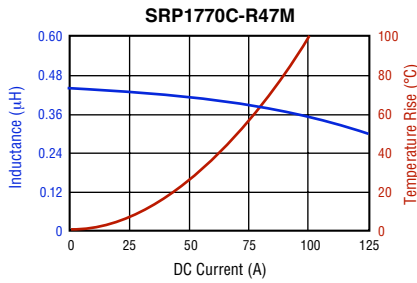
* RoHS Directive 2015/863, Mar 31, 2015 and Annex.
 **Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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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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