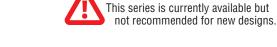


Features

- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Inductance range: 0.10 to 22 µH
- RoHS compliant* and halogen free**

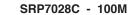


SRP7028C Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

| | Inductance @ 100 kHz /1 V | | Q (Min.) | SRF | DCR | DCR | Irms | Isat | |
|---------------|---------------------------------|------|----------|-------|---------------|-------|------|------|---------------|
| Bourns | 1 (.1) | Tol. | @100 kHz | (MHz) | (m Ω) | (mΩ) | (A) | (A) | Terminal |
| Part Number | L (µH) | (%) | /1V | Тур. | Тур. | Max. | Тур. | Тур. | Туре |
| SRP7028C-R10M | 0.10 | ± 20 | 5 | 196 | 1.2 | 1.7 | 37.5 | 60.0 | |
| SRP7028C-R15M | 0.15 | ± 20 | 5 | 190 | 1.5 | 1.9 | 27.0 | 50.0 | |
| SRP7028C-R24M | 0.24 | ± 30 | 10 | 118 | 2.5 | 3.1 | 23.0 | 39.0 | |
| SRP7028C-R25M | 0.25 | ± 20 | 10 | 118 | 2.5 | 3.1 | 23.0 | 39.0 | |
| SRP7028C-R33M | 0.33 | ± 20 | 10 | 115 | 3.5 | 3.9 | 20.0 | 32.0 | |
| SRP7028C-R47M | 0.47 | ± 20 | 10 | 62 | 4.0 | 4.3 | 17.5 | 27.0 | |
| SRP7028C-R68M | 0.68 | ± 20 | 15 | 55 | 4.8 | 5.5 | 15.5 | 25.0 | |
| SRP7028C-1R0M | 1.00 | ± 20 | 15 | 45 | 8.3 | 10.0 | 11.0 | 22.0 | Lood |
| SRP7028C-1R5M | 1.50 | ± 20 | 15 | 40 | 11.0 | 14.0 | 9.0 | 18.0 | Lead Frame |
| SRP7028C-2R2M | 2.20 | ± 20 | 15 | 32 | 15.0 | 18.0 | 8.0 | 14.0 | Traine |
| SRP7028C-3R3M | 3.30 | ± 20 | 15 | 25 | 27.0 | 30.0 | 6.0 | 13.5 | |
| SRP7028C-4R7M | 4.70 | ± 20 | 15 | 21 | 37.0 | 40.0 | 5.5 | 10.0 | |
| SRP7028C-6R8M | 6.80 | ± 20 | 15 | 16 | 54.0 | 60.0 | 4.5 | 8.3 | |
| SRP7028C-8R2M | 8.20 | ± 20 | 15 | 15 | 60.0 | 66.0 | 4.1 | 6.8 | |
| SRP7028C-100M | 10.00 | ± 20 | 15 | 14 | 63.0 | 68.0 | 3.5 | 6.0 | |
| SRP7028C-150M | 15.00 | ± 20 | 20 | 12 | 107.0 | 123.0 | 3.0 | 4.0 | |
| SRP7028C-220M | 22.00 | ± 20 | 20 | 10 | 155.0 | 180.0 | 2.2 | 3.6 | |

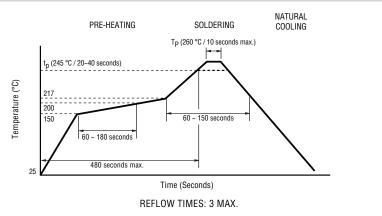
How to Order



Please consult Bourns® Model SRP-A Series Visual Inspection Guide for detailed construction, processing and testing information.

Model Value Code (see table)

Soldering Profile





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 (CI) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (CI) 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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General Specifications

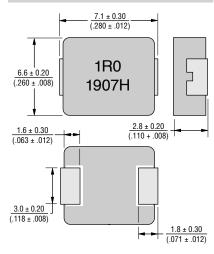
Operating Temperature

| 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 | | | | | |
| 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. | | | | | |

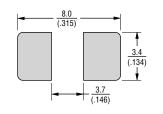
Materials

| Core | Metal alloy powder |
|-----------------|-----------------------|
| Wire | Enameled copper |
| Terminal Finish | Śn/Ni |
| Packaging 1000 | pcs. per 13-inch reel |

Product Dimensions



Recommended Layout



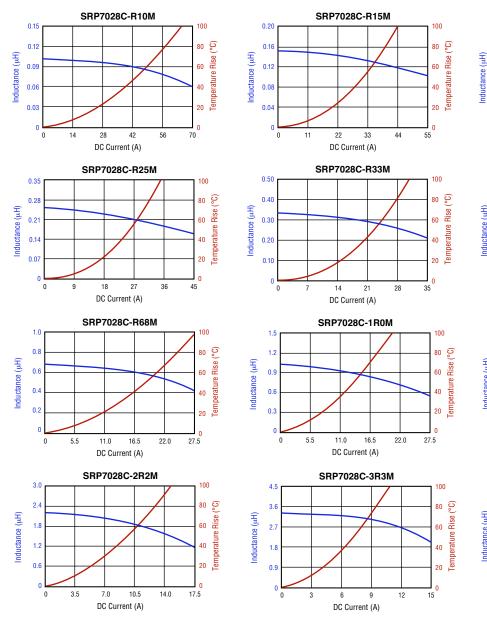
MM DIMENSIONS: (INCHES)

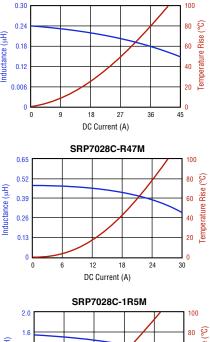
SRP7028C Series - Shielded Power Inductors

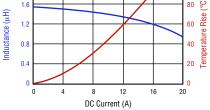
BOURNS

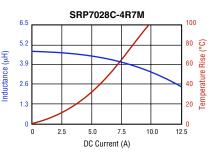
SRP7028C-R24M

L vs. I Charts









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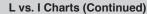
Specifications are subject to change without notice.

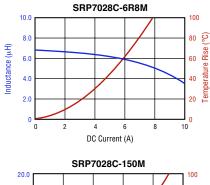
Users should verify actual device performance in their specific applications.

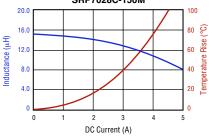
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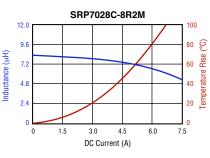
SRP7028C Series - Shielded Power Inductors

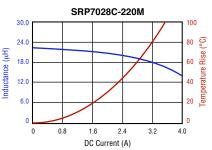
BOURNS

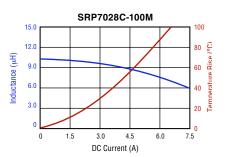








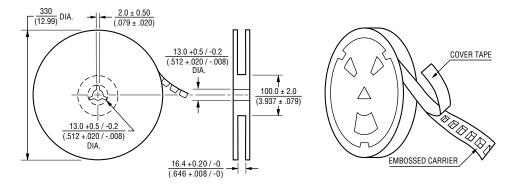


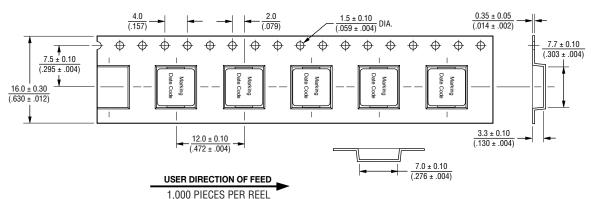


Electrical Schematic



Packaging Specifications





REV. 05/22

Specifications are subject to change without notice.

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