

Features

- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Inductance range: 0.22 to 33 μ H
- RoHS compliant* and halogen free**

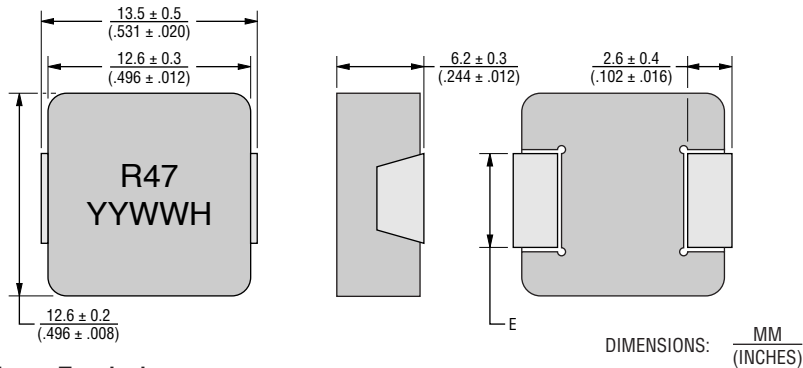
SRP1265C Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

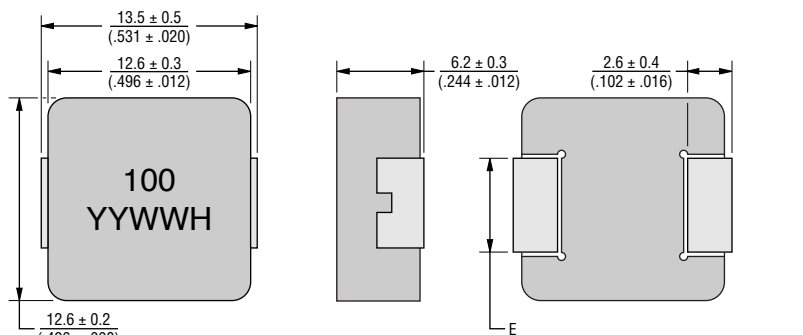
| Bourns Part Number | Inductance @ 100 kHz / 1 V | | Q (Min.) @100 kHz | SRF (MHz) Typ. | DCR (m Ω) Typ. | DCR (m Ω) Max. | I _{rms} (A) Typ. | Isat (A) Typ. | Terminal Type |
|--------------------|----------------------------|----------|-------------------|----------------|------------------------|------------------------|---------------------------|---------------|---------------|
| | L (μ H) | Tol. (%) | | | | | | | |
| SRP1265C-R22M | 0.22 | 20 | 10 | 98 | 0.47 | 0.6 | 55 | 105 | non-leadframe |
| SRP1265C-R33M | 0.33 | 20 | 10 | 72 | 0.65 | 0.8 | 50 | 70 | |
| SRP1265C-R47M | 0.47 | 20 | 20 | 62 | 0.9 | 1.2 | 45 | 66 | |
| SRP1265C-R68M | 0.68 | 20 | 20 | 44 | 1.25 | 1.5 | 41 | 62 | |
| SRP1265C-1R0M | 1.0 | 20 | 20 | 37 | 1.7 | 2.3 | 35 | 54 | |
| SRP1265C-1R5M | 1.5 | 20 | 20 | 28 | 2.3 | 2.8 | 31 | 46 | |
| SRP1265C-2R2M | 2.2 | 20 | 20 | 23 | 4.2 | 4.8 | 25 | 40 | leadframe |
| SRP1265C-3R3M | 3.3 | 20 | 20 | 18 | 5.7 | 6.8 | 22 | 37 | |
| SRP1265C-4R7M | 4.7 | 20 | 20 | 15 | 8.3 | 9.5 | 20 | 31 | |
| SRP1265C-6R8M | 6.8 | 20 | 20 | 14 | 11.5 | 13.2 | 15 | 25 | |
| SRP1265C-8R2M | 8.2 | 20 | 20 | 13 | 13 | 15.5 | 13 | 22 | |
| SRP1265C-100M | 10 | 20 | 20 | 12 | 15.6 | 18 | 12 | 20 | |
| SRP1265C-150M | 15 | 20 | 20 | 10 | 23.2 | 28 | 11 | 13.5 | |
| SRP1265C-220M | 22 | 20 | 20 | 7 | 32.5 | 37 | 10 | 12 | |
| SRP1265C-330M | 33 | 20 | 20 | 5 | 46 | 56 | 8 | 9 | |

Product Dimensions

Non-Lead Frame Terminal



Lead Frame Terminal



E: SRP1265C-1R0M through -1R5M: $\frac{4.0 \pm 0.3}{(.157 \pm .012)}$

E: SRP1265C-R22M through -R68M and SRP1265C-2R2M through -330M: $\frac{4.7 \pm 0.3}{(.185 \pm .012)}$

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 I_{rms}¹
 Moisture Sensitivity Level 1
 ESD Classification (HBM) N/A

¹ Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all can affect the part temperature. Part temperature should be verified in the end application.

Materials

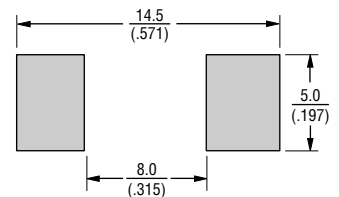
Core Metal alloy powder
 Wire Enameled copper
 Terminal Finish Sn
 Packaging 500 pcs. per 13-inch reel

How to Order

SRP1265C - 100M

Model _____
 Value Code (see table) _____

Recommended Layout



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

* 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. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

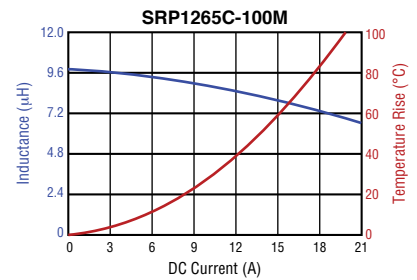
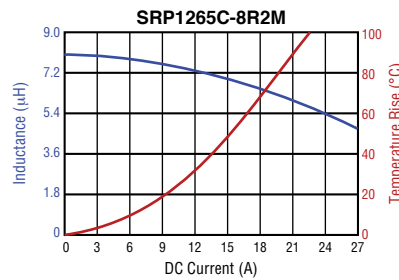
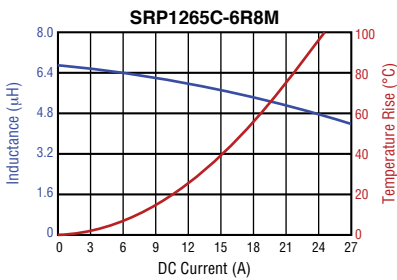
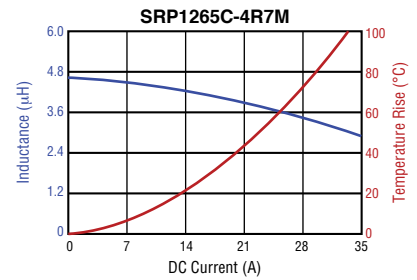
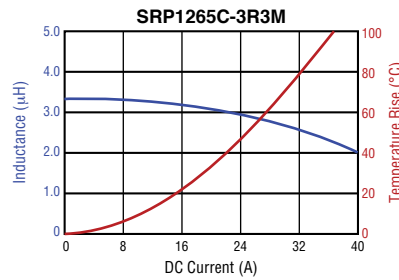
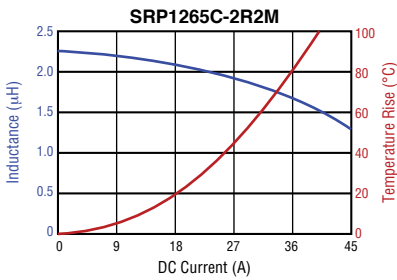
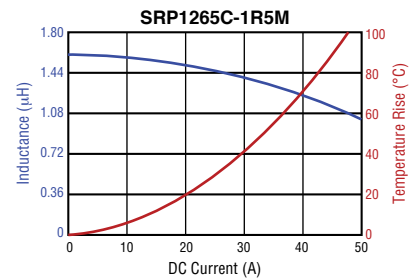
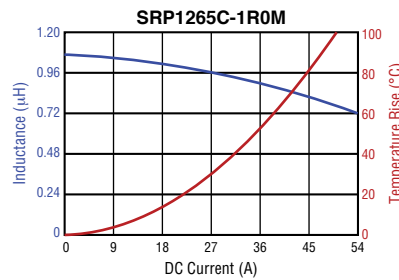
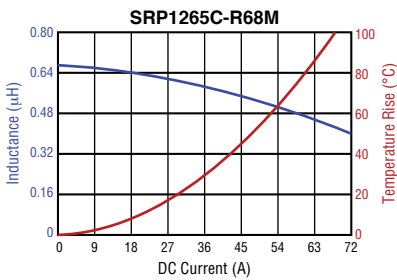
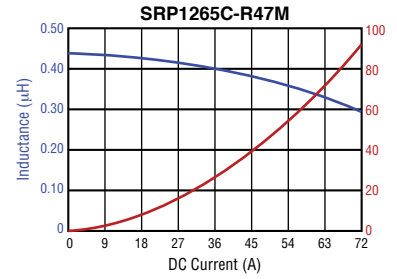
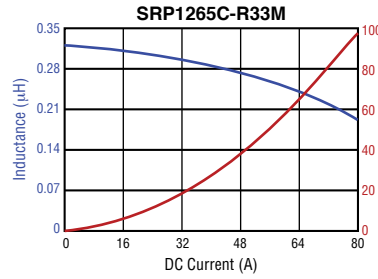
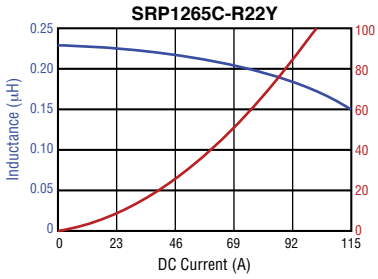


WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

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L vs. I Charts



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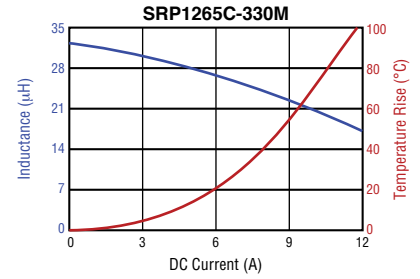
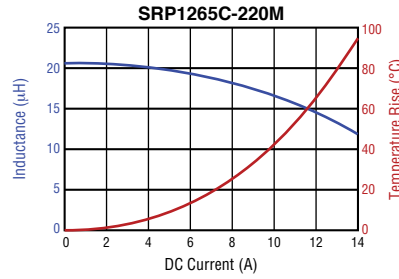
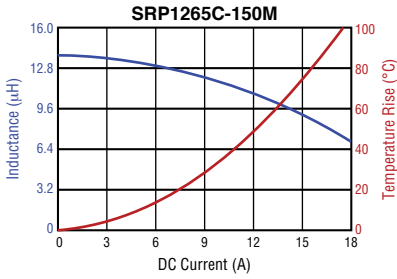
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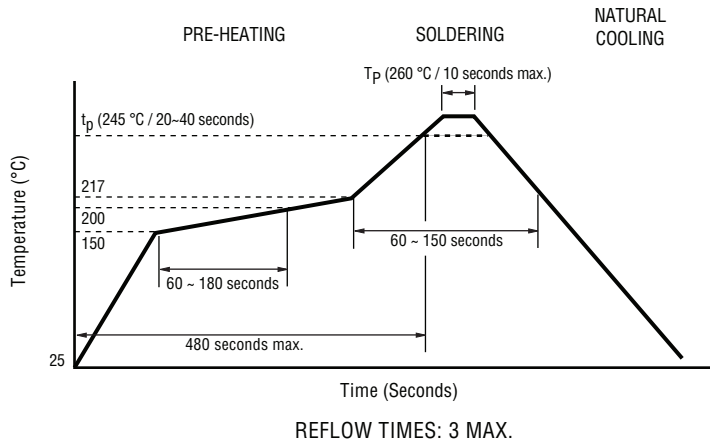
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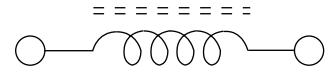
L vs. I Charts



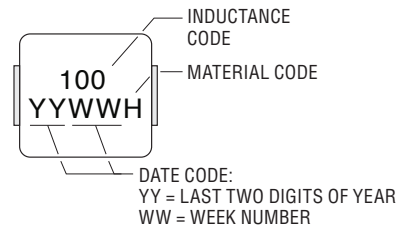
Soldering Profile



Electrical Schematic



Typical Part Marking



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