

Features

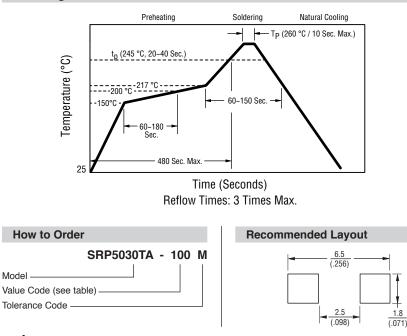
- Shielded construction
- Carbonyl powder core
- High saturation current
- Inductance range: 0.1 to 10 µH
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

SRP5030TA Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

| Bourns Part Number | Inductance @ 100 KHz / 1 V | | Q (Min.) @100 KHz | SRF (MHz) | DCR (mΩ) | DCR (mΩ) | Irms | Isat (A) | Terminal |
|-----------------------|----------------------------------|-------------|----------------------|--------------|-------------|-------------|------|-------------|---------------|
| | L (µH) | Tol. (%) | /1V | Тур. | Тур. | Max. | (A) | (A) | Туре |
| SRP5030TA-R10Y | 0.1 | ± 30 | 5 | 320 | 2.5 | 3 | 23 | 27 | Lead Frame |
| SRP5030TA-R22M | 0.22 | ±20 | 5 | 155 | 3.7 | 4.4 | 15.5 | 21 | |
| SRP5030TA-R33M | 0.33 | ± 20 | 5 | 110 | 4.3 | 5 | 14 | 18 | |
| SRP5030TA-R47M | 0.47 | ± 20 | 10 | 100 | 6.4 | 7.4 | 12 | 16 | |
| SRP5030TA-R68M | 0.68 | ± 20 | 10 | 85 | 10 | 12 | 8.5 | 14 | |
| SRP5030TA-1R0M | 1.0 | ± 20 | 10 | 62 | 13 | 14 | 7 | 11 | |
| SRP5030TA-1R2M | 1.2 | ± 20 | 10 | 50 | 14 | 16 | 6.5 | 11 | |
| SRP5030TA-1R5M | 1.5 | ± 20 | 10 | 44 | 16 | 25 | 6 | 10 | |
| SRP5030TA-2R2M | 2.2 | ± 20 | 15 | 36 | 25 | 35 | 5.5 | 9 | |
| SRP5030TA-3R3M | 3.3 | ± 20 | 15 | 30 | 32 | 38 | 5 | 8 | |
| SRP5030TA-3R6M | 3.6 | ± 20 | 15 | 29 | 46 | 54 | 4.9 | 7 | |
| SRP5030TA-4R7M | 4.7 | ± 20 | 15 | 23 | 50 | 53 | 4.6 | 6 | |
| SRP5030TA-5R6M | 5.6 | ± 20 | 15 | 21 | 55 | 63 | 4.25 | 4.5 | |
| SRP5030TA-6R8M | 6.8 | ± 20 | 15 | 19 | 68 | 76.2 | 4 | 4.3 | |
| SRP5030TA-100M | 10 | ± 20 | 20 | 18 | 110 | 128 | 2.75 | 3.5 | |

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 (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.odf.

Additional Information

Click these links for more information:



General Specifications

Operating Temperature

.....-55 °C to +150 °C (Temperature rise included) Storage Temperature

.....-55 °C to +150 °C Rated Current

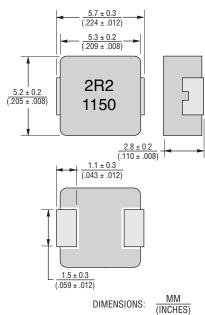
Note 1: Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

Materials

| Core | Carbonyl powder |
|------------------|----------------------|
| Wire | Enameled copper |
| Terminal Finish | Sn |
| Packaging 2000 p | cs. per 13-inch reel |

Product Dimensions

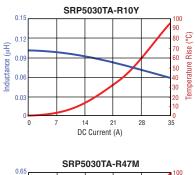
Lead Frame Terminal

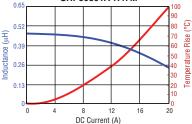


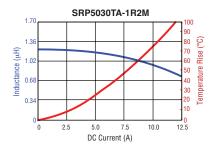
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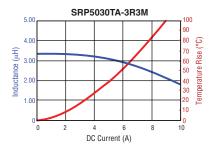
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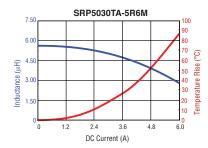
L vs. I Charts

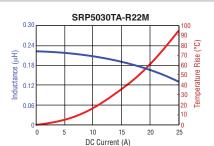




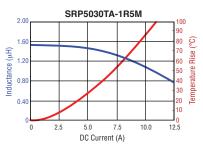


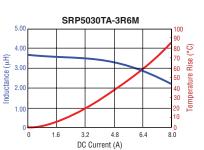


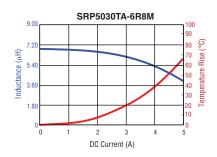


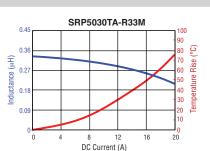


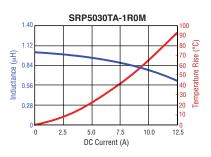


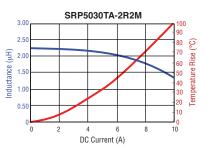


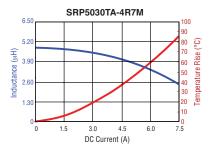


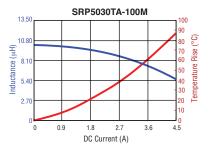












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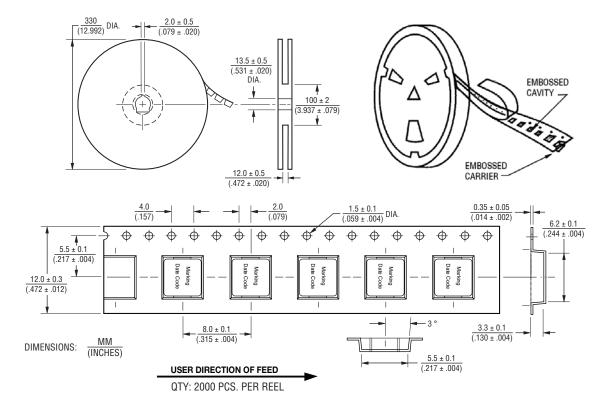
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SRP5030TA Series - Shielded Power Inductors

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Packaging Specifications



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