



**THE DATASHEET OF
SRP5030TA-R10Y**





Features

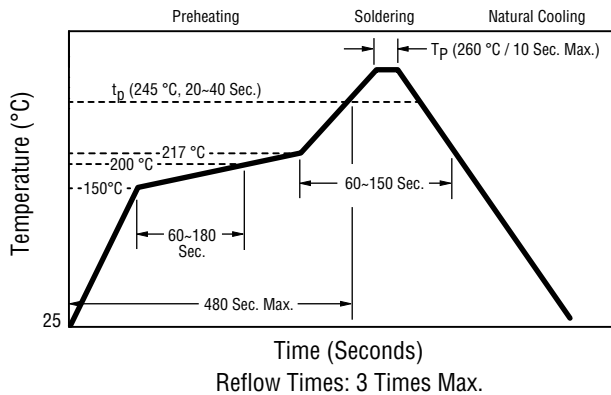
- Shielded construction
- Carbonyl powder core
- High saturation current
- Inductance range: 0.1 to 10 μH
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

SRP5030TA Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

| Bourns Part Number | Inductance @ 100 KHz / 1 V | | Q (Min.) @ 100 KHz / 1 V | SRF (MHz) Typ. | DCR (m Ω) Typ. | DCR (m Ω) Max. | Irms (A) | Isat (A) | Terminal Type |
|--------------------|----------------------------|----------|--------------------------|----------------|------------------------|------------------------|----------|----------|---------------|
| | L (μH) | Tol. (%) | | | | | | | |
| 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

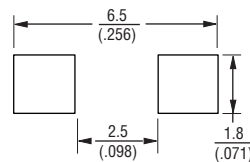


How to Order

SRP5030TA - 100 M

Model _____
 Value Code (see table) _____
 Tolerance Code _____

Recommended Layout



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 Inductance drops 20 % at Isat
 Temperature Rise40 °C at rated Irms
 Moisture Sensivity Level 1
 ESD Classification (HBM)..... N/A

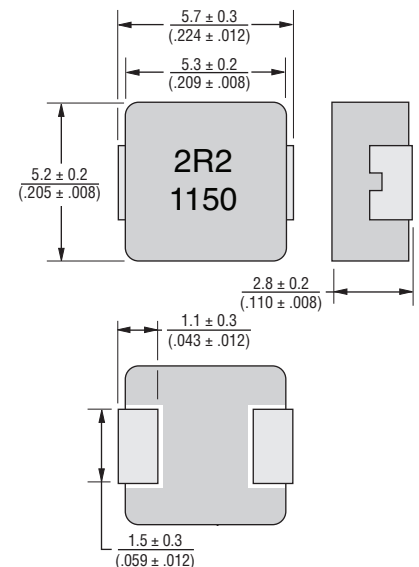
Note 1: Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

Materials

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

Product Dimensions

Lead Frame Terminal



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$



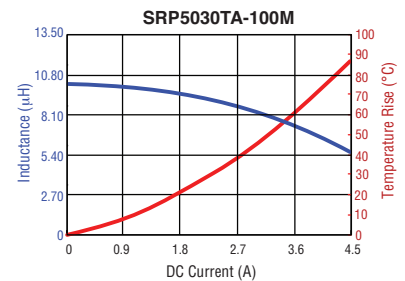
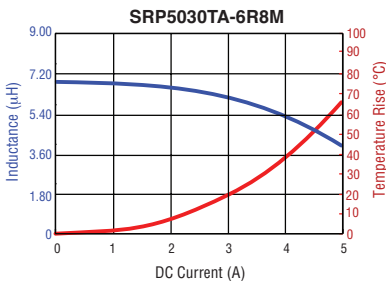
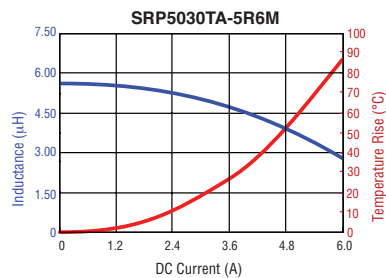
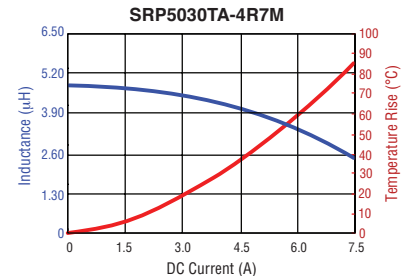
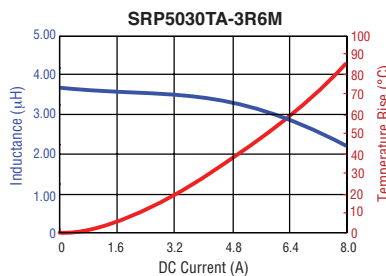
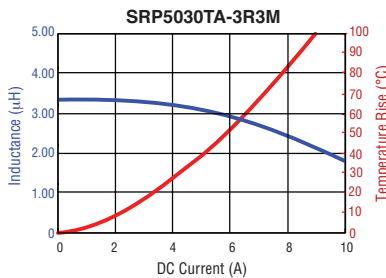
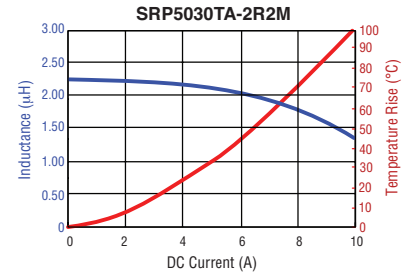
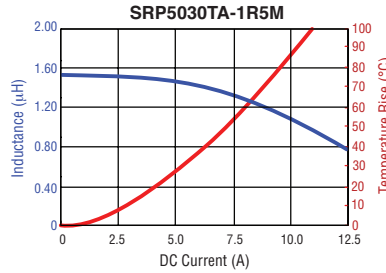
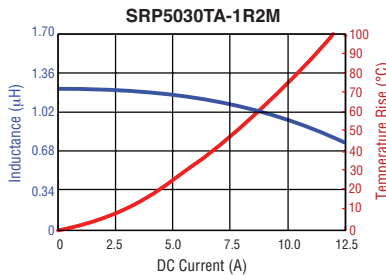
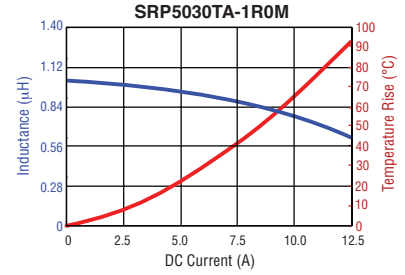
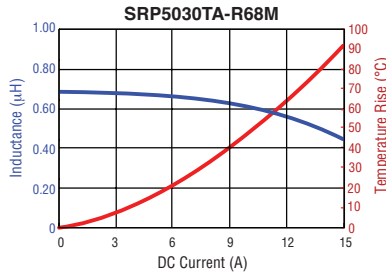
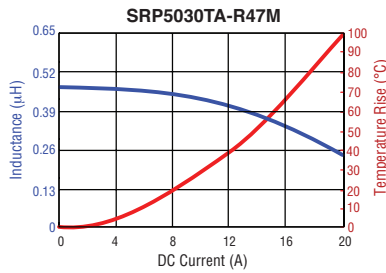
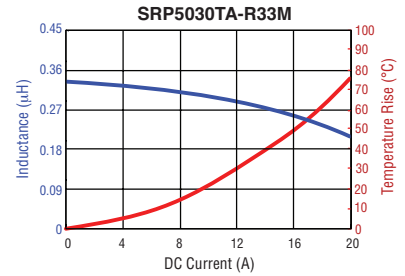
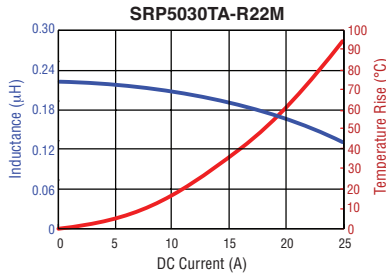
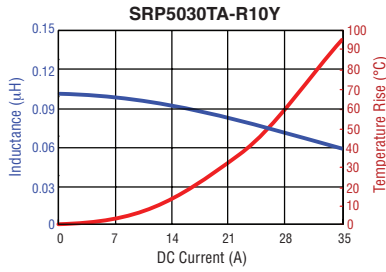
WARNING Cancer and Reproductive Harm www.P65Warnings.ca.gov

* 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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L vs. I Charts



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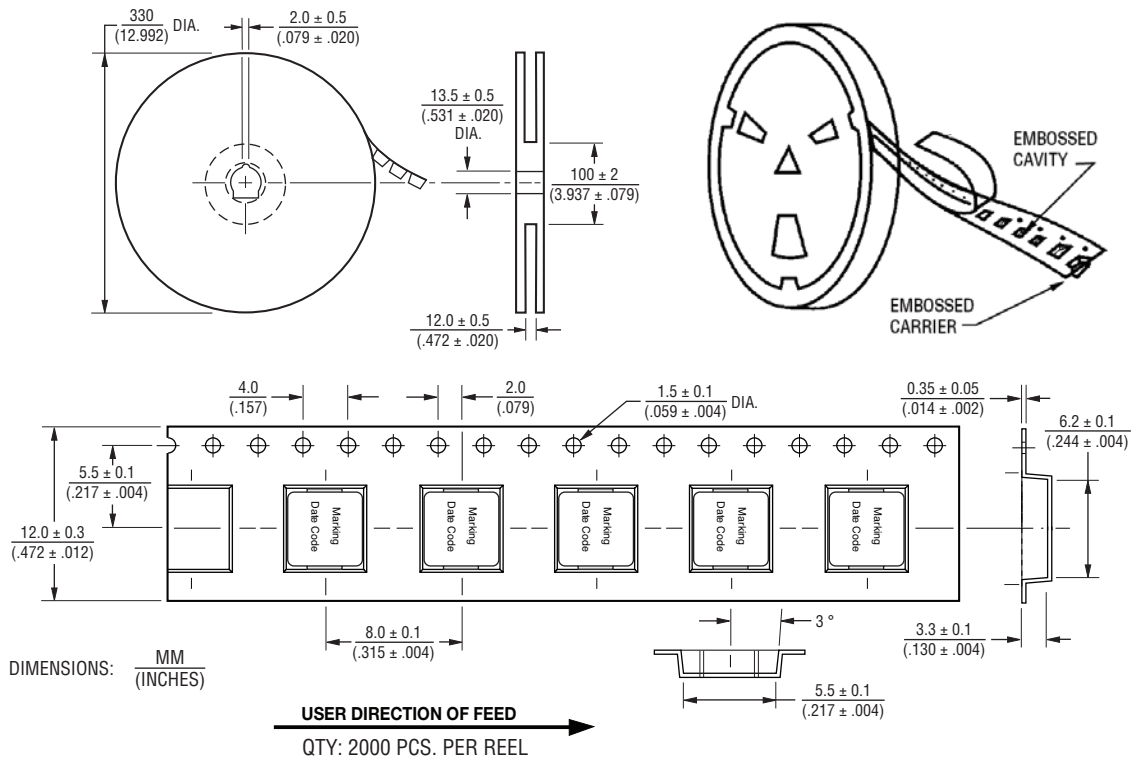
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SRP5030TA Series - Shielded Power Inductors

BOURNS®

Packaging Specifications



BOURNS®

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REV. 11/19

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