



Features

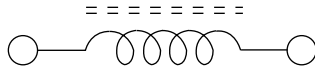
- Shielded construction
- Metal alloy powder core
- High saturation current
- Inductance range 0.33 to 10 μH
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

SRP5020TA 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 (μH)	Tol. (%)							
SRP5020TA-R33M	0.33	20	10	117	6.3	7.3	12	21.3	Lead Frame
SRP5020TA-R47M	0.47	20	11	100	7.3	8.6	11.5	18	Lead Frame
SRP5020TA-R68M	0.68	20	12	90	11	12.4	10	12.8	Lead Frame
SRP5020TA-1R0M	1.00	20	13	64	17.5	20	7	13.7	Lead Frame
SRP5020TA-1R2M	1.20	20	14	58	23	28	6.2	11	Lead Frame
SRP5020TA-1R5M	1.50	20	15	52	26.5	30.5	5.5	9.8	Lead Frame
SRP5020TA-2R2M	2.20	20	16	38	42	50	4.2	9	Lead Frame
SRP5020TA-3R3M	3.30	20	17	35	66	76	3.3	7.3	Lead Frame
SRP5020TA-4R7M	4.70	20	18	30	103	116	2.8	5	Lead Frame
SRP5020TA-5R6M	5.60	20	19	25	112	122	2.5	4	Lead Frame
SRP5020TA-6R8M	6.80	20	20	23	130	150	2.4	3.8	Lead Frame
SRP5020TA-8R2M	8.20	20	21	20	148	171	2.3	3.5	Lead Frame
SRP5020TA-100M	10	20	22	18	180	199	2.3	3.4	Lead Frame

Electrical Schematic

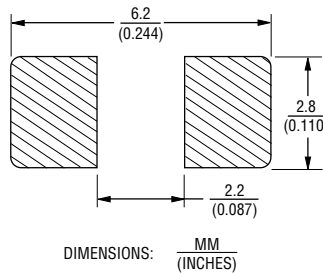


How to Order

SRP5020TA - 100M

Model _____
Value Code (see table) _____

Recommended Layout



BOURNS®

Americas: Tel: +1 951-781-5500

Email: americus@bourns.com

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www.bourns.com



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.

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.

Additional Information

Click these links for more information:



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General Specifications

Operating Temperature

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

Storage Temperature (Component)

..... -55 °C to +150 °C

Rated Current

..... Inductance drops 20 % at I_{sat}

Temperature Rise 40 °C at rated I_{rms}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

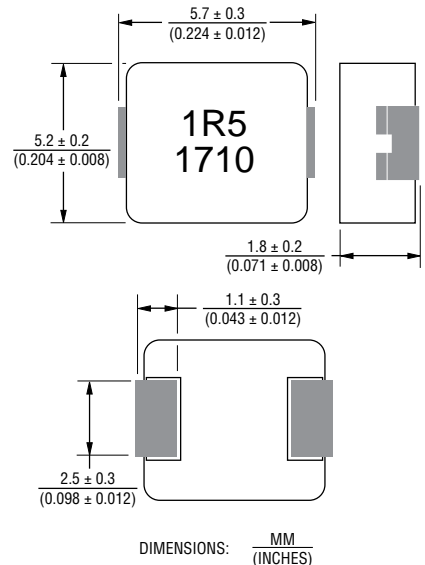
Core.....Metal alloy powder

WireEnameled copper

Terminal Finish Sn

Packaging..... 3000 pcs. per 13-inch reel

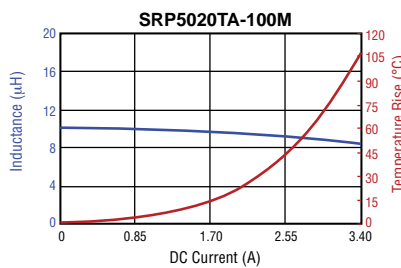
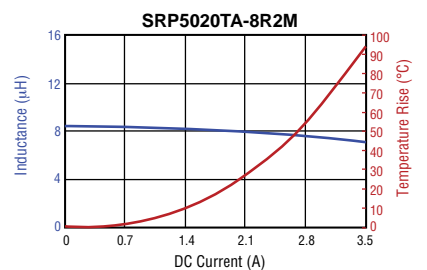
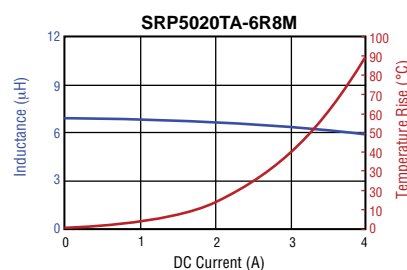
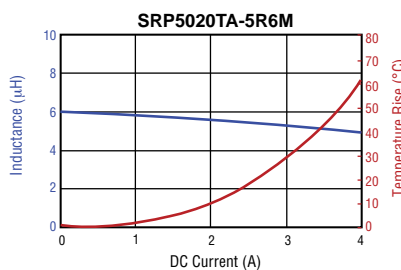
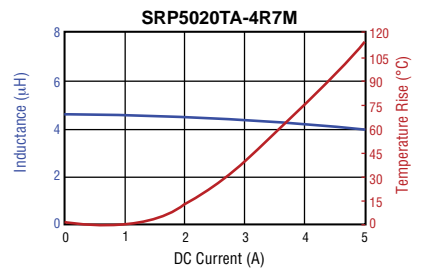
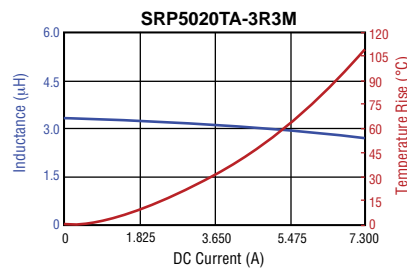
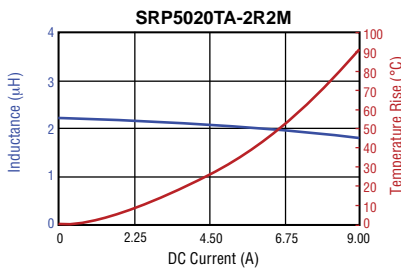
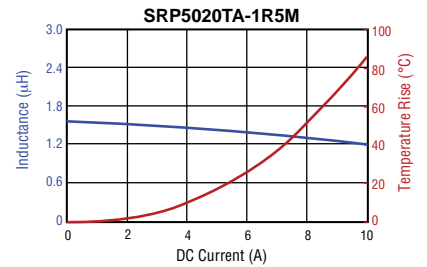
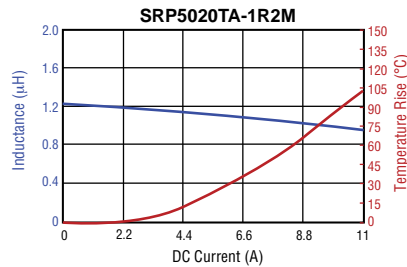
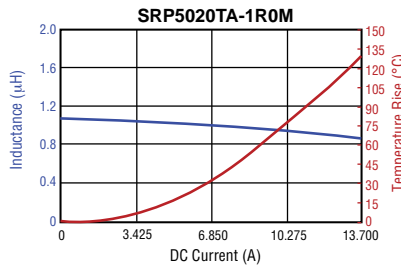
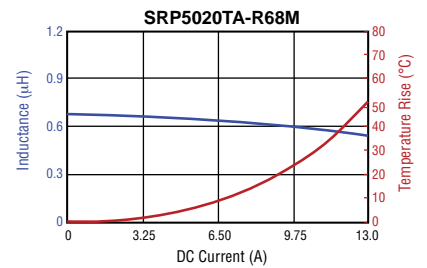
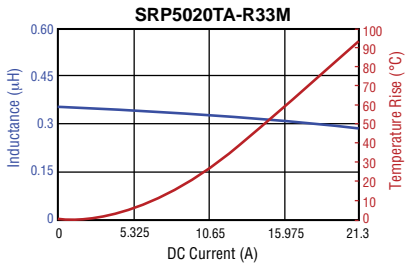
Product Dimensions



SRP5020TA Series – Shielded Power Inductors



L vs. I Charts



Specifications are subject to change without notice.

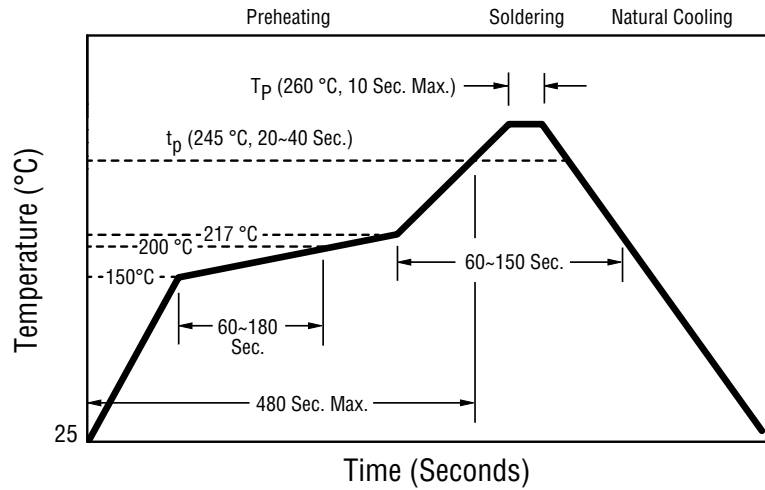
Users should verify actual device performance in their specific applications.

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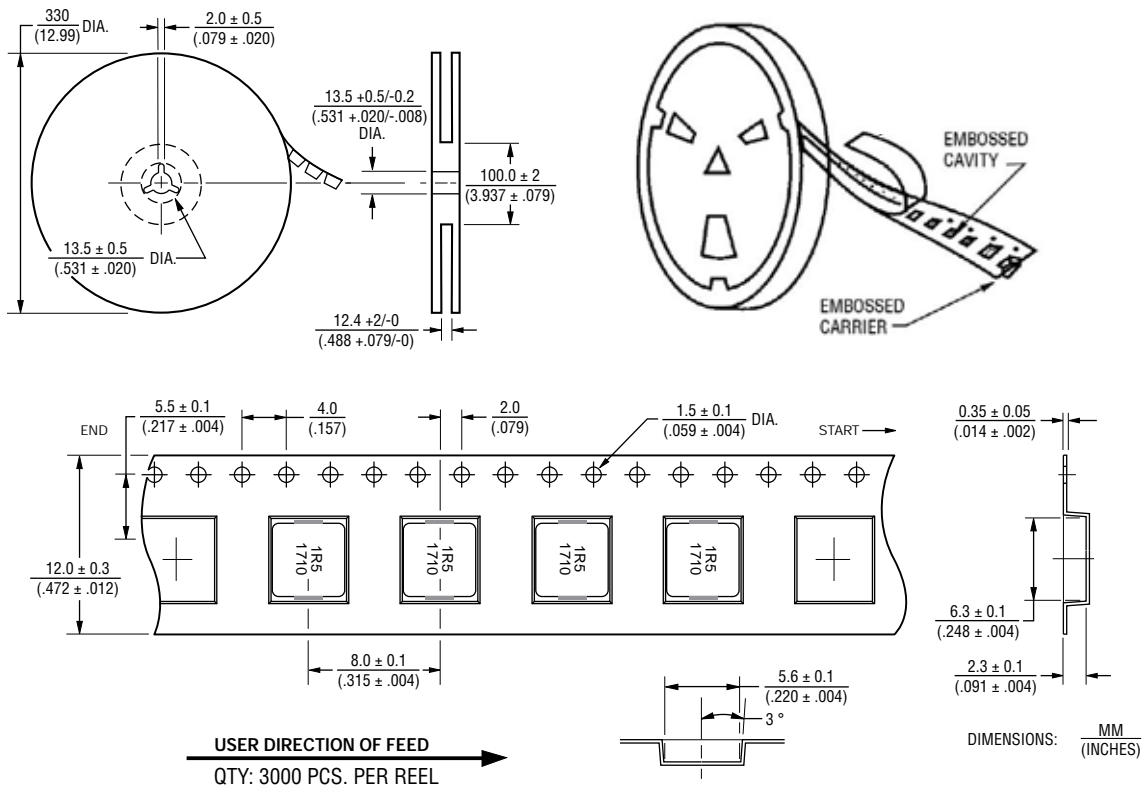
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BOURNS®

Soldering Profile



Packaging Specifications



REV. 06/24

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