THE DATASHEET OF

SRP5020TA-1R0M

Features

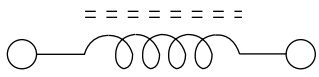
- Shielded construction
- Metal alloy powder core
- High saturation current
- Inductance range 0.33 to 10 µH
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

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 (mΩ) Typ.	DCR (mΩ) Max.	Irms (A) Typ.	Isat (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



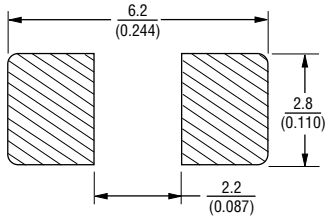
How to Order

SRP5020TA - 100M

Model

Value Code (see table)

Recommended Layout



DIMENSIONS: MM (INCHES)

General Specifications

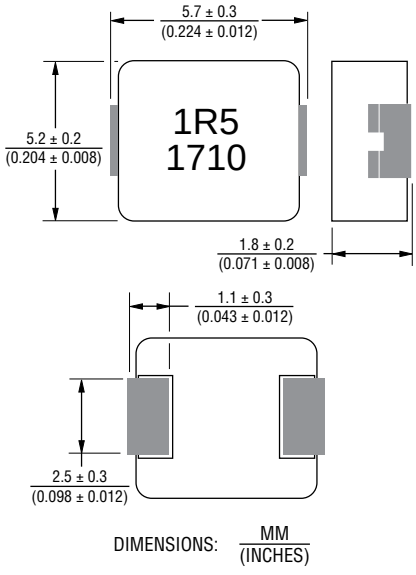
Operating Temperature
.....-55 °C to +150 °C
(Temperature rise included)
Storage Temperature (Component)
.....-55 °C to +150 °C
Rated Current
..... Inductance drops 20 % at Isat
Temperature Rise ...40 °C at rated Irms[1]
Moisture Sensitivity Level.....1
ESD Classification (HBM).....N/A

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

Product Dimensions



DIMENSIONS: MM (INCHES)

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The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com
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.

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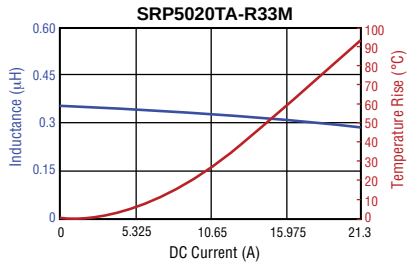
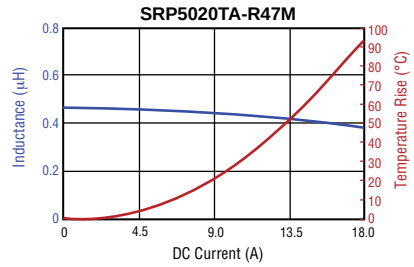
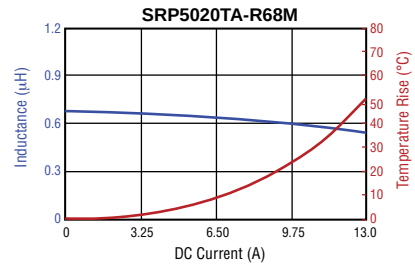
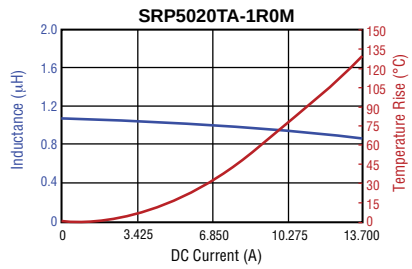
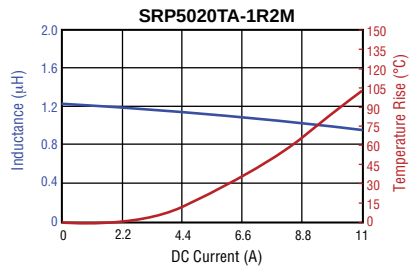
L vs. I Charts

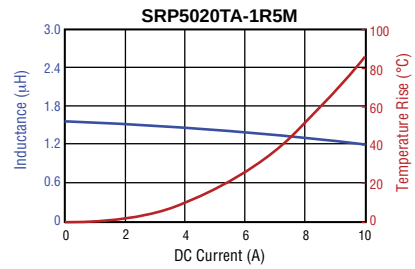


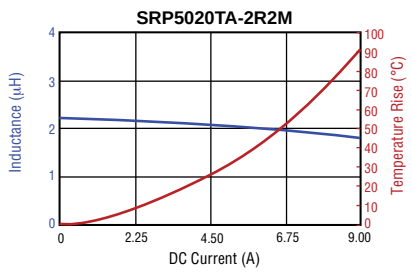


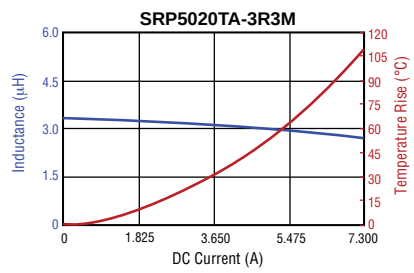


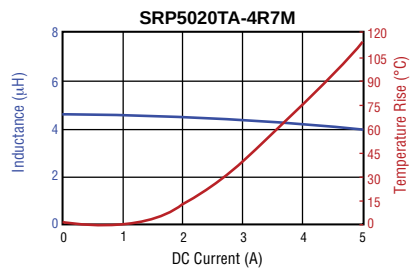


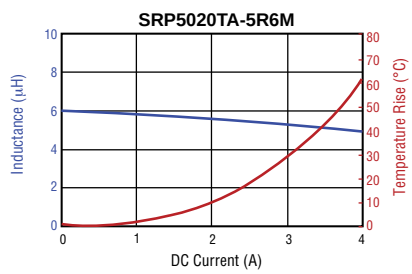


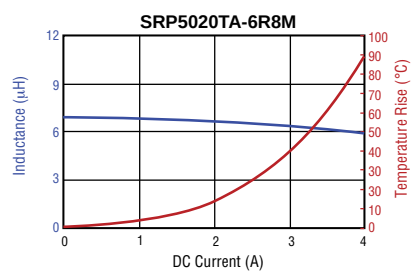


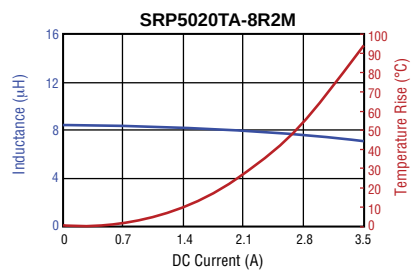


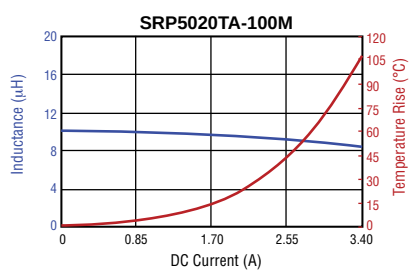












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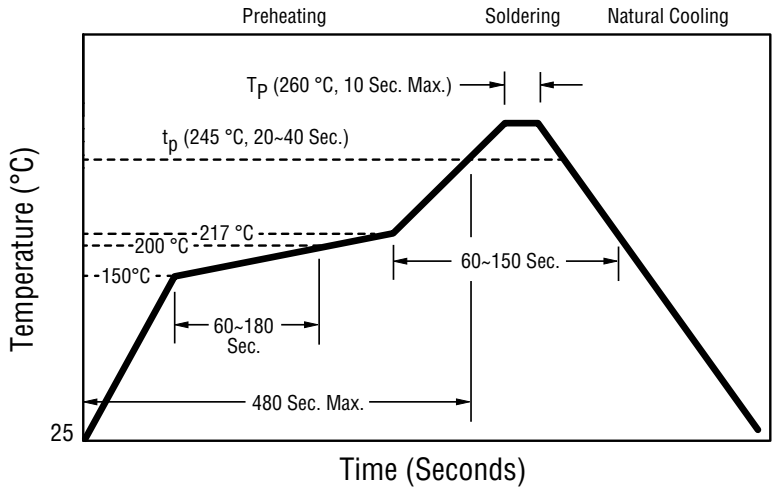
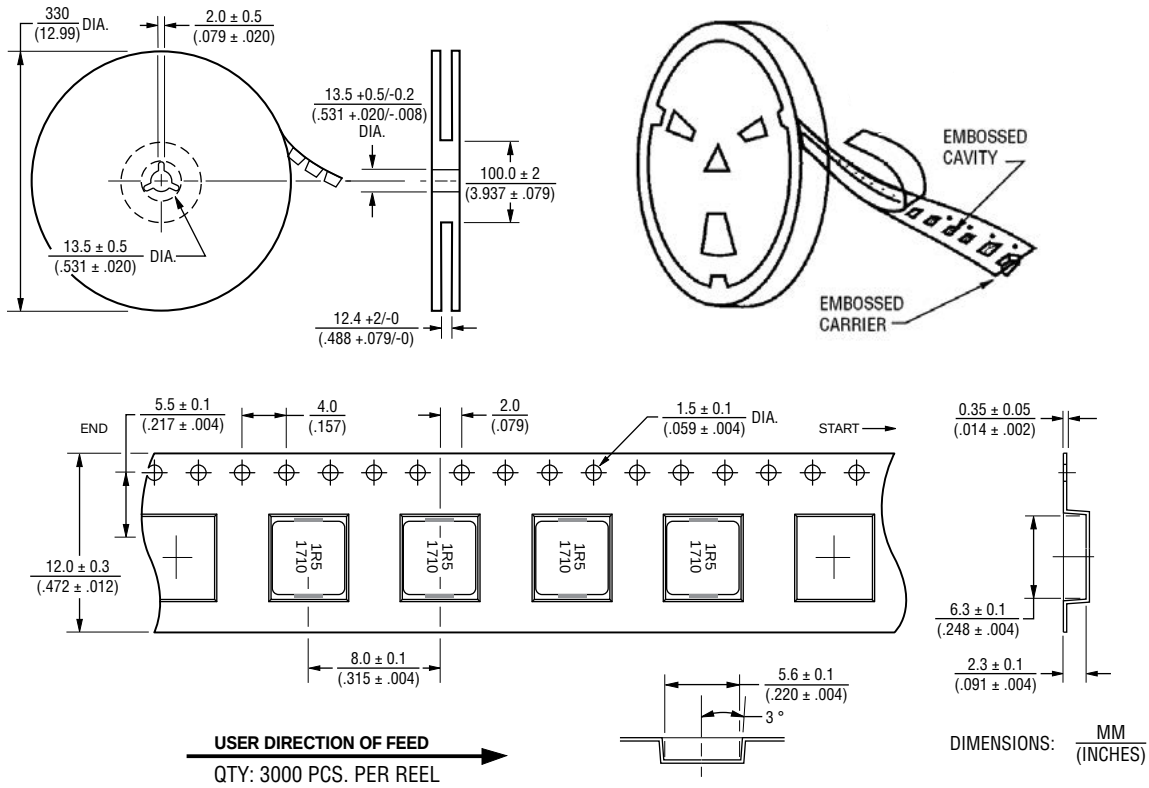
Soldering Profile



Packaging Specifications



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