

Features

- Shielded construction
- Carbonyl powder core
- High saturation current
- Inductance range: 0.1 to 22 µH
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

SRP4020TA Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 KHz / 1 V L (µH)	Tol. (%)	Q (Min.) @100 KHz / 1 V	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	Irms (A)	Isat (A)	Terminal Type
SRP4020TA-R10Y	0.10	±30	5	300	3.2	4	12	35	Lead Frame
SRP4020TA-R22Y	0.22	±30	10	270	6.6	7.3	11	24	
SRP4020TA-R33M	0.33	±20	10	130	7.8	8.6	10	18	
SRP4020TA-R47M	0.47	±20	10	120	11.2	14	8.0	12	
SRP4020TA-R56M	0.56	±20	10	105	13.5	16	7.3	10	
SRP4020TA-R68M	0.68	±20	10	100	16	19	7.0	10	
SRP4020TA-1R0M	1.0	±20	10	65	22	27	5.0	8.5	
SRP4020TA-1R2M	1.2	±20	10	64	25	30	4.8	7.8	
SRP4020TA-1R5M	1.5	±20	10	62	34.8	42	4.5	7.0	
SRP4020TA-2R2M	2.2	±20	10	45	51	61	4.0	6.0	
SRP4020TA-3R3M	3.3	±20	10	40	69	76	3.5	4.0	
SRP4020TA-4R7M	4.7	±20	10	27	95	105	2.6	3.5	
SRP4020TA-5R6M	5.6	±20	10	25	112	125	2.2	3.0	
SRP4020TA-6R8M	6.8	±20	10	24	150	172	2.1	2.8	
SRP4020TA-8R2M	8.2	±20	10	21	158	180	2.0	2.5	
SRP4020TA-100M	10.0	±20	10	19	215	243	1.8	2.3	
SRP4020TA-150M	15.0	±20	10	17	325	374	1.5	1.9	
SRP4020TA-220M	22.0	±20	10	12	470	500	1.2	1.4	

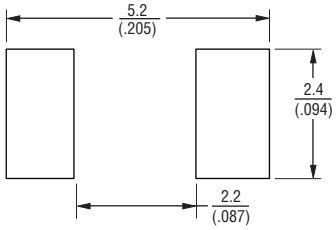
How to Order

SRP4020TA - 100M

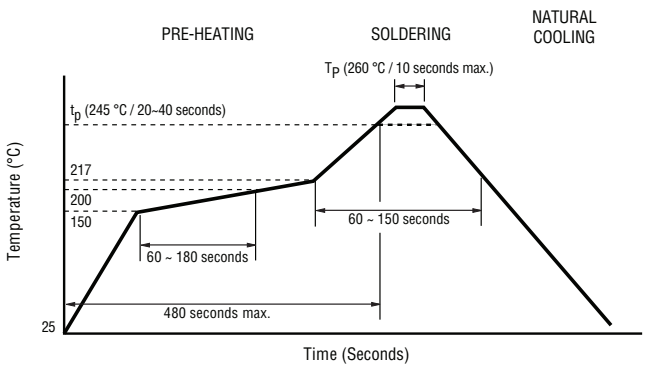
Model

Value Code (see table)

Recommended Layout



Soldering Profile



REFLOW TIMES: 3 MAX.

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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General Specifications

Test Voltage.....1.0 V
Test Frequency.....100 KHz
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 Rise .....40 °C at rated Irms
Moisture Sensitivity Level.....1
ESD Classification (HBM).....N/A

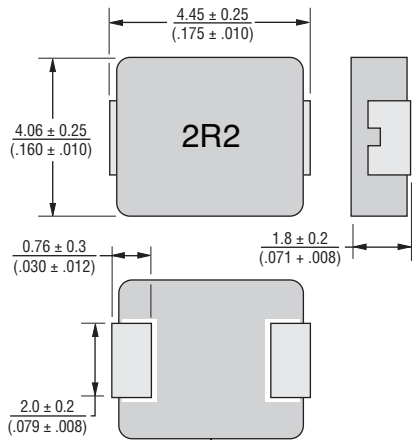
[1] Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

Materials

Core.....Carbonyl powder
Wire .....Enameled copper
Terminal Finish .....Sn
Packaging..... 3000 pcs. per 13-inch reel

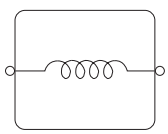
Product Dimensions

Lead Frame Terminal



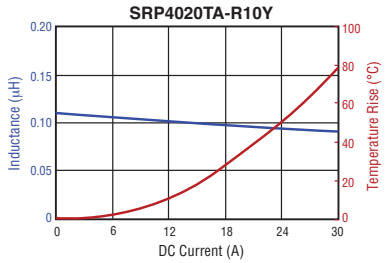
DIMENSIONS: MM (INCHES)

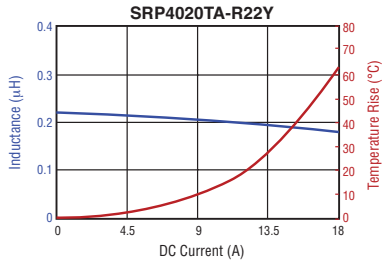
Electrical Schematic

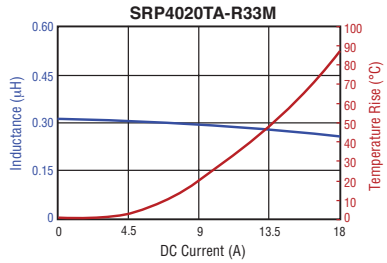


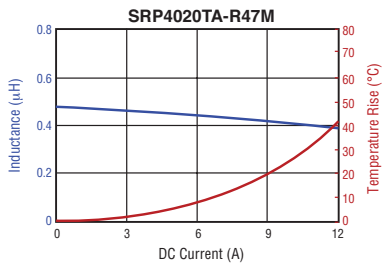
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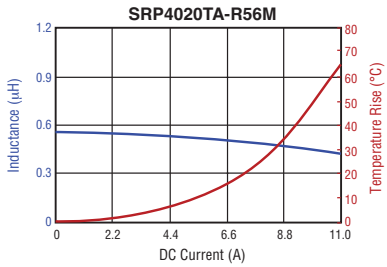
L vs. I Charts

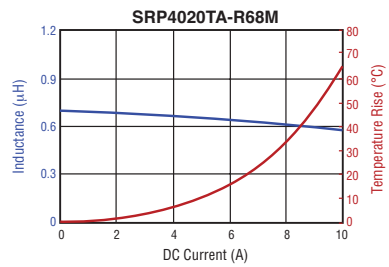


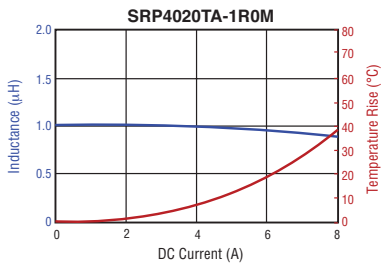


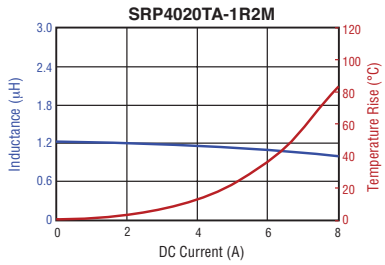


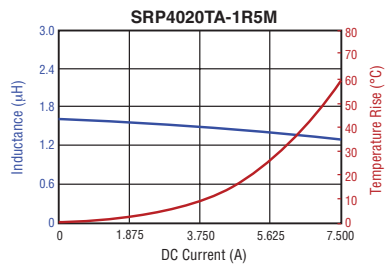


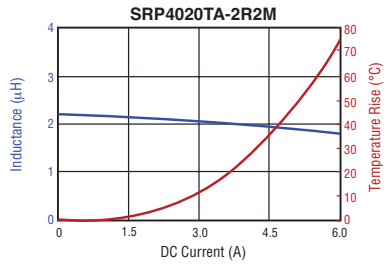


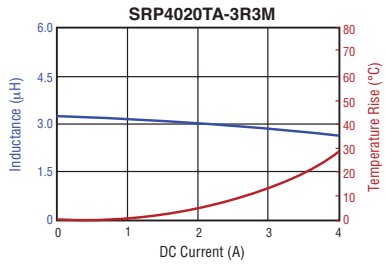


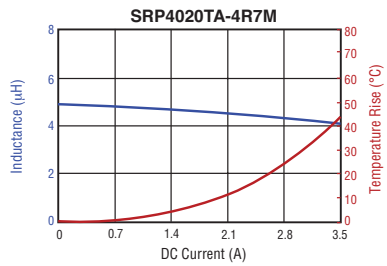


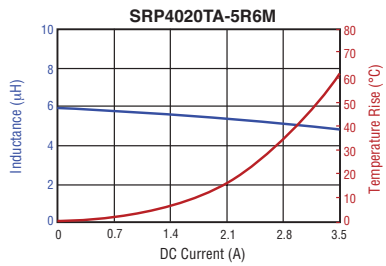


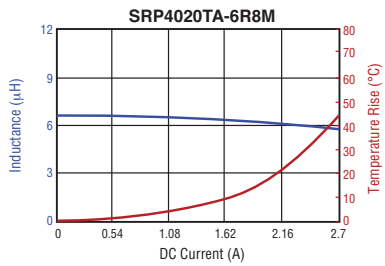


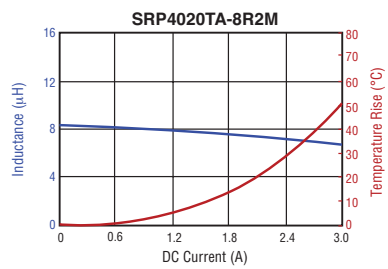








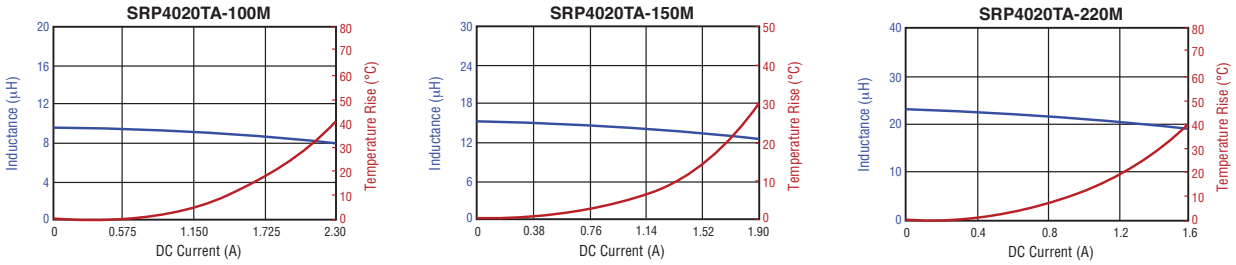




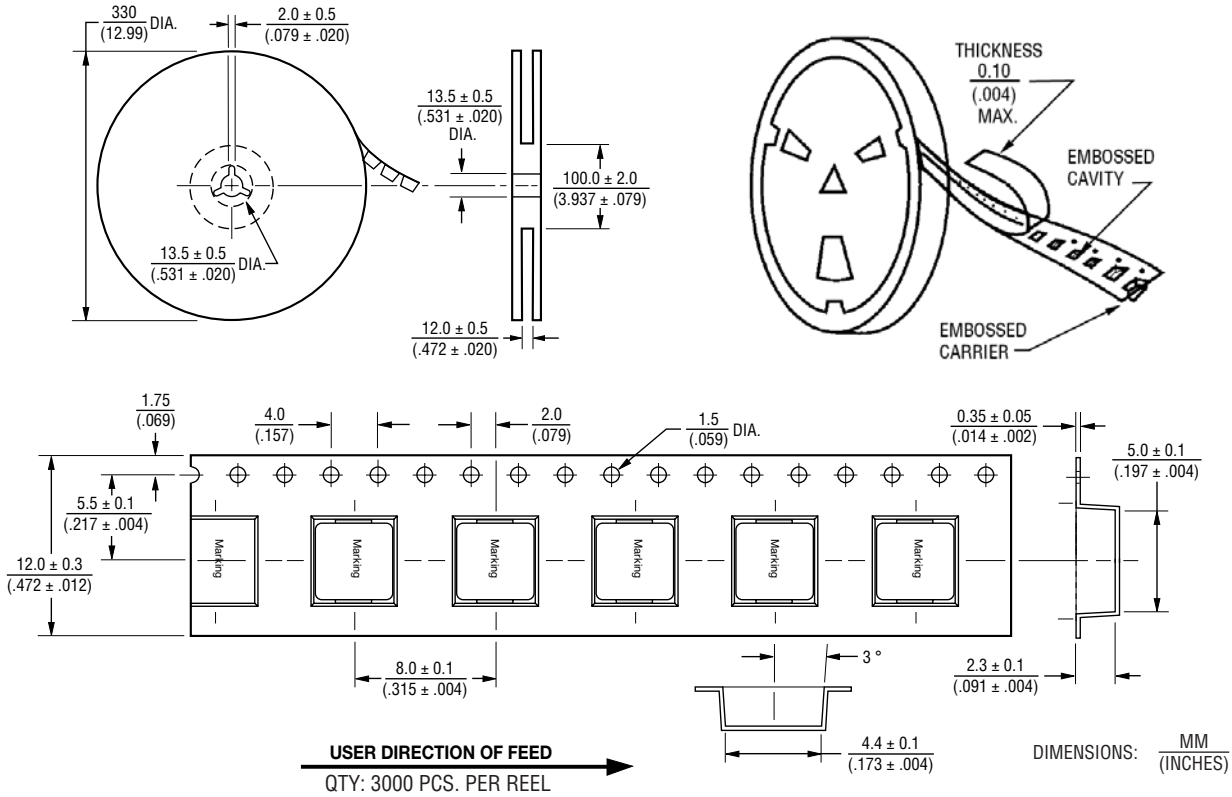
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L vs. I Charts



Packaging Specifications



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