

### **Features**

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

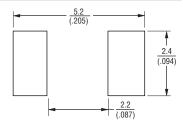
# SRP4020TA Series - Shielded Power Inductors

### Electrical Specifications @ 25 °C

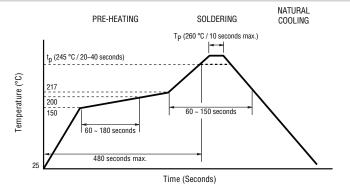
	Inductance @ 100 KHz / 1 V		Q (Min.)	SRF	DCR	DCR			
Bourns Part Number	L (μΗ)	Tol. (%)	@100 KHz /1 V	(MHz) Typ.	(mΩ) Typ.	(mΩ) Max.	Irms (A)	Isat (A)	Terminal Type
SRP4020TA-R10Y	0.10	±30	5	300	3.2	4	12	35	
SRP4020TA-R22Y	0.22	±30	10	270	6.6	7.3	11	24	
SRP4020TA-R33M	0.33	±20	10	130	7.8	8.6	10	18	
SRP4020TA-R47M	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	Lead
SRP4020TA-2R2M	2.2	±20	10	45	51	61	4.0	6.0	Frame
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**

## **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. 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 <a href="https://www.bourns.com/docs/legal/disclaimer.odf">www.bourns.com/docs/legal/disclaimer.odf</a>.

## **General Specifications**

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

Storage Temperature

.....-55 °C to +150 °C

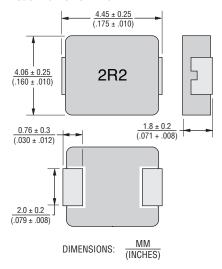
Rated Current

<sup>1</sup> 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**

### **Product Dimensions**

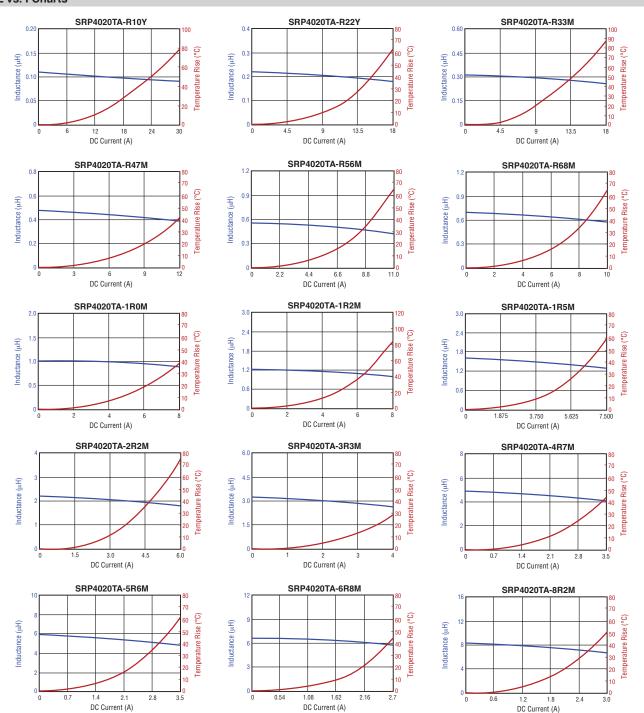
### **Lead Frame Terminal**



### **Electrical Schematic**



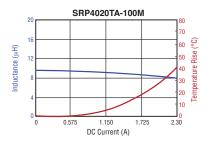
## L vs. I Charts

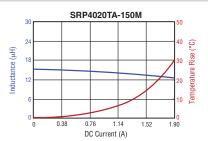


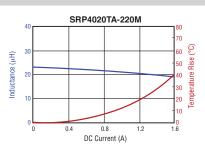
# **SRP4020TA Series - Shielded Power Inductors**

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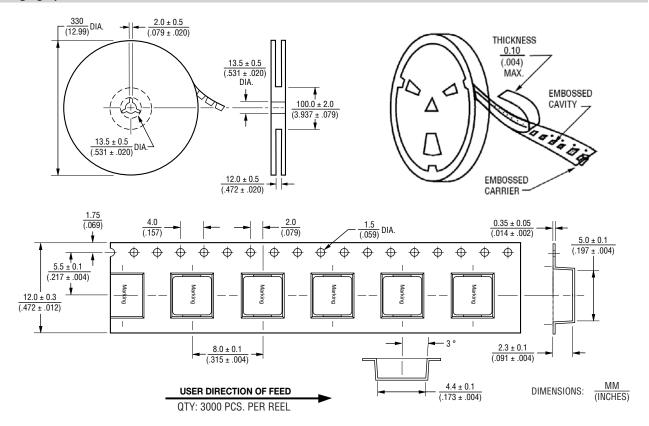
## L vs. I Charts







## **Packaging Specifications**



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REV. 07/20

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