

Features

- Compact size
- Shielded construction for low radiation
- Metal alloy powder core for high saturation current
- Flat wire
- Low DCR

- Wide range of operating temperatures
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

SRP2010TMA Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

	Inductance @ 1 MHz / 1 V		Q 1 MHz	SRF (MHz)	DCR (mΩ)	DCR (mΩ)	Irms (A)	Isat (A)
Bourns Part No.	L (μH)	Tol. %	Тур.	Typ.	Typ.	Max.	Typ.	Typ.
SRP2010TMA-R24M	0.24	20	15	130	18	20.5	6.5	7.7
SRP2010TMA-R33M	0.33	20	15	112	21	26	5.7	7.0
SRP2010TMA-R47M	0.47	20	15	82	28	32	5.3	6.0
SRP2010TMA-R56M	0.56	20	15	80	31	37.2	4.6	5.2
SRP2010TMA-R68M	0.68	20	15	78	44	50	4.0	5.0
SRP2010TMA-1R0M	1.00	20	15	60	49	59	3.6	4.4
SRP2010TMA-1R5M	1.50	20	15	52	80	96	2.6	3.0
SRP2010TMA-2R2M	2.20	20	15	42	130	150	2.3	2.65

Product Dimensions 20 + 03 1.6 ± 0.3 (.079 ± .012) $(.063 \pm .012)$ SIDE VIEW SIDE VIEW 0.8 ± 0.2 $\overline{(.031 \pm .008)}$ (.028 ± .012) DIMENSIONS: (INCHES) **BOTTOM VIEW**

Recommended Layout (.098) $\frac{1.9}{(.075)}$ 0.5 **Electrical Schematic**

Additional Information

Click these links for more information:











LIBRARY

General Specifications

Operating Temperature

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

Storage Temperature (Component)

.....-55 °C to +150 °C Temperature Rise ... 40 °C at rated Irms1

Rated Current Inductance drops 30 % at Isat 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

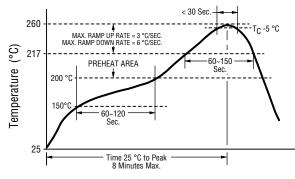
Core.....Metal alloy powder WireEnameled copper Terminal FinishNi/Sn Packaging...... 2000 pcs. per 7-inch reel

How to Order

SRP2010TMA - 1R0M

Model -Value Code (see table)

Soldering Profile



Time (Seconds)

Profile Feature	Pb Free Assembly			
Preheat - Temperature Min. (T _{Smin}) - Temperature Max. (T _{Smax}) - Time(t _S) from T _{Smin} to T _{Smax}	150 °C 200 °C 60-120 seconds			
Ramp-up Rate (T _L to T _p)	3 °C/second max.			
Liquidous temperature (T _L) Time (t _L) maintained above T _L	217 °C 60-150 seconds			
Peak package body temperature (Tp)	260 °C			
Time within 5 °C of Actual Peak Temperature (t _p)	< 30 seconds			
Ramp-Down Rate (T _p to T _L)	6 °C/second max.			
Time 25 °C to Peak Temperature	8 minutes max.			

REFLOW TIMES: 3 TIMES MAX.

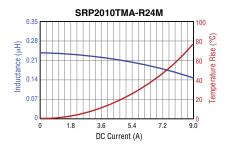
- Specifications are subject to change without notice. Users should
- RoHS Directive 2015/863, Mar 31, 2015 and Annex. Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (CI) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

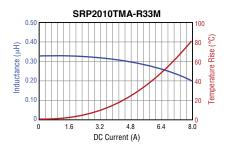


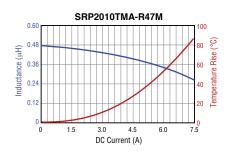
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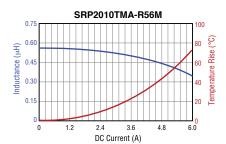
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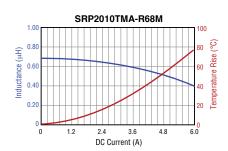
L vs. I Charts

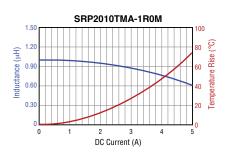


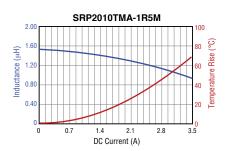


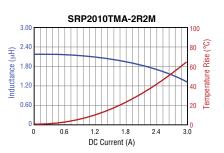








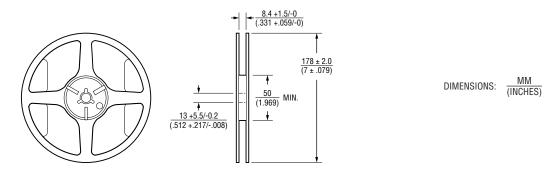


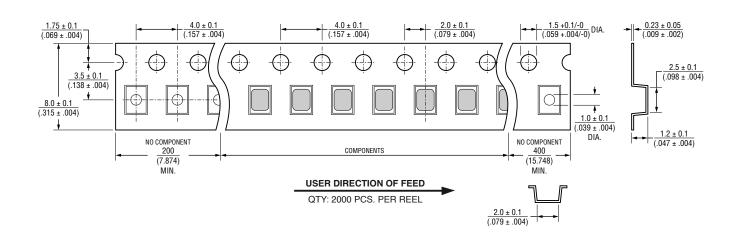


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BOURNS

Packaging Specifications





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