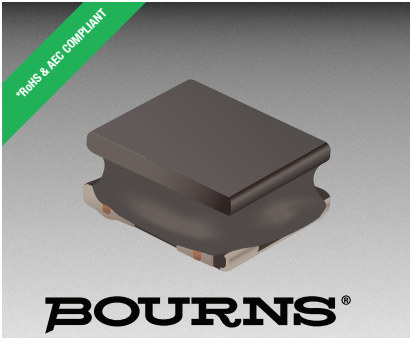




# THE DATASHEET OF SRN-A-LAB1





### Features

- Semi-shielded construction
- Inductance range: 0.47 to 22  $\mu$ H
- Rated current up to 2.3 A
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

This series is currently available but not recommended for new designs. Contact Bourns for alternative product information.

## SRN2010TA Series - Semi-shielded Power Inductors

### Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 1 MHz / 0.1 V		Q (Typ.) @ 1 MHz	SRF (MHz) Typ.	DCR ( $\Omega$ ) $\pm 20\%$	I <sub>rms</sub> (A) Max.	I <sub>sat</sub> (A) Max.
	L ( $\mu$ H)	Tol. %					
SRN2010TA-R47Y	0.47	$\pm 30$	12	270	0.044	2.35	2.7
SRN2010TA-R68Y	0.68	$\pm 30$	12	210	0.062	2.05	2
SRN2010TA-1R0Y	1.0	$\pm 30$	12	170	0.08	1.6	1.8
SRN2010TA-1R5Y	1.5	$\pm 30$	12	140	0.13	1.26	1.46
SRN2010TA-2R2M	2.2	$\pm 20$	14	100	0.145	1.2	1.26
SRN2010TA-3R3M	3.3	$\pm 20$	14	95	0.245	0.95	0.9
SRN2010TA-4R7M	4.7	$\pm 20$	14	62	0.36	0.9	0.77
SRN2010TA-6R8M	6.8	$\pm 20$	14	52	0.5	0.55	0.72
SRN2010TA-100M	10	$\pm 20$	16	43	0.72	0.45	0.55
SRN2010TA-150M	15	$\pm 20$	16	40	1.4	0.36	0.45
SRN2010TA-180M	18	$\pm 20$	16	35	1.8	0.34	0.4
SRN2010TA-220M	22	$\pm 20$	16	30	2	0.27	0.38

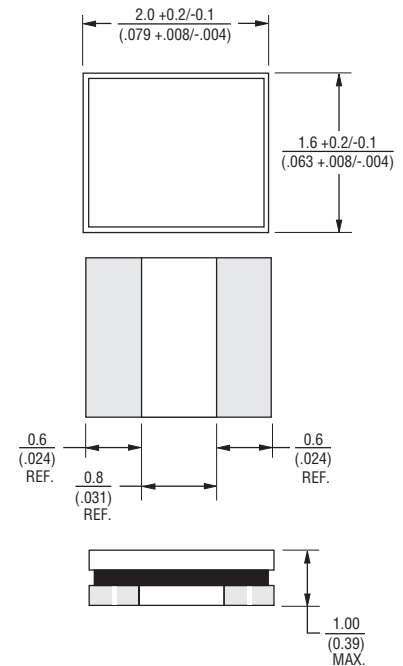
### General Specifications

Operating Temperature ..... -55 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature .. -55 °C to +125 °C  
 Temperature Rise ..... 40 °C at rated I<sub>rms</sub>  
 Rated Current  
 ..... Inductance drops 30 % at I<sub>sat</sub>  
 Failure In Time (FIT) ..... 24.7/10<sup>9</sup> hours  
 Mean Time Between Failures (MTBF)  
 ..... 40.4 x 10<sup>6</sup> hours

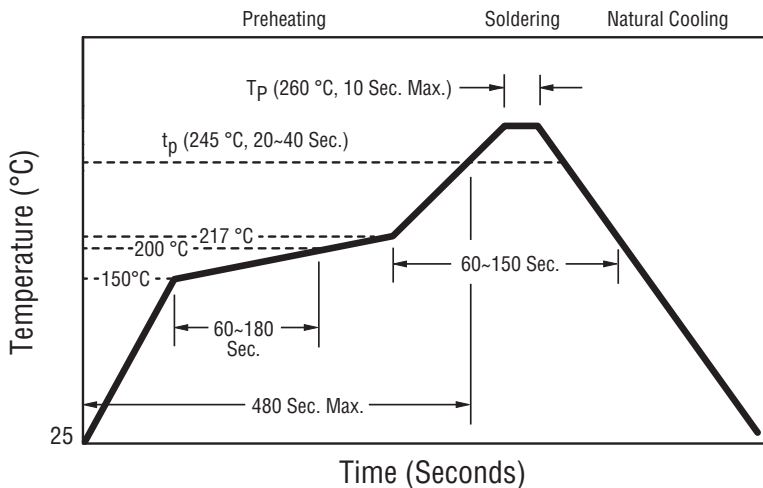
### Materials

Core ..... Ferrite  
 Wire ..... Enameled copper  
 Terminal Finish ..... Sn  
 Coating ..... Magnetic epoxy resin  
 Packaging ..... 2000 pcs. per 7-inch reel

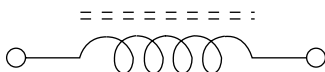
### Product Dimensions



### Soldering Profile



### Electrical Schematic

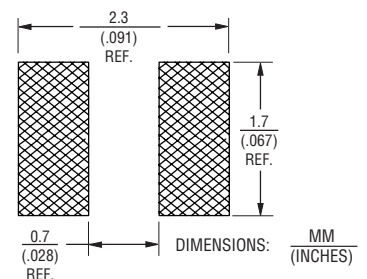


### How to Order

**SRN2010TA - R68Y**

Model \_\_\_\_\_  
 Value Code (see table) \_\_\_\_\_

### Recommended Layout



\* 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.

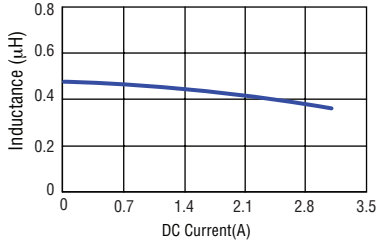
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# SRN2010TA Series - Semi-shielded Power Inductors

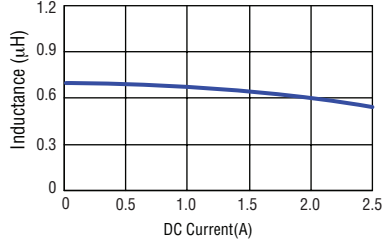
**BOURNS®**

## Inductance vs. Current

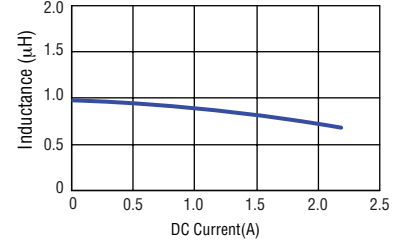
SRN2010TA-R47Y



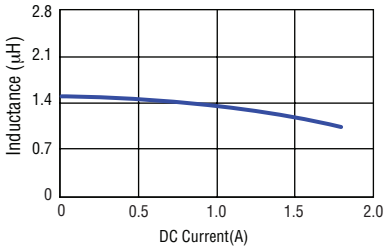
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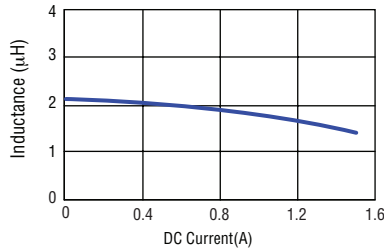
SRN2010TA-1R0Y



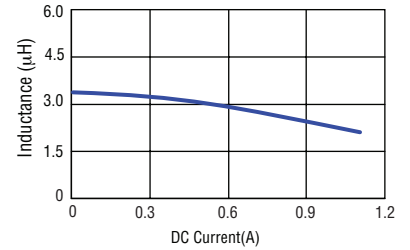
SRN2010TA-1R5Y



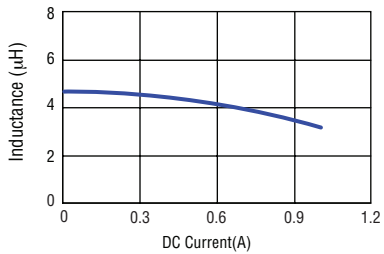
SRN2010TA-2R2M



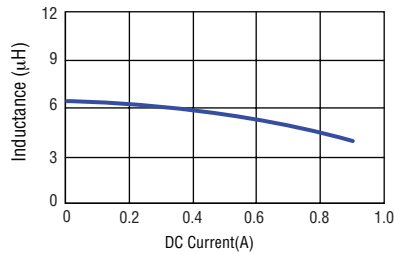
SRN2010TA-3R3M



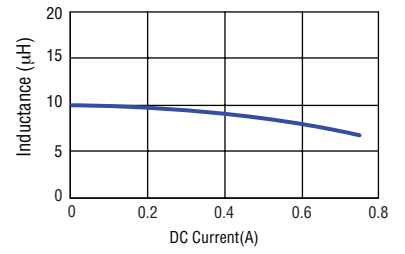
SRN2010TA-4R7M



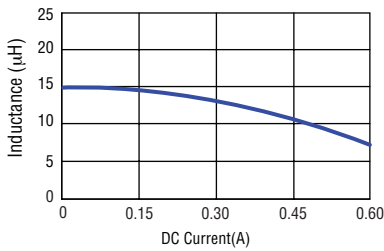
SRN2010TA-6R8M



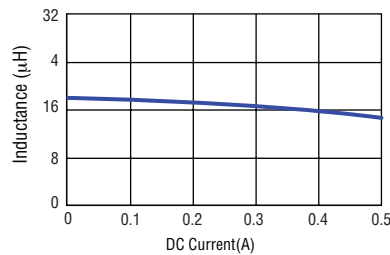
SRN2010TA-100M



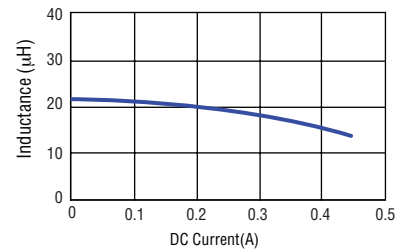
SRN2010TA-150M



SRN2010TA-180M



SRN2010TA-220M



Specifications are subject to change without notice.

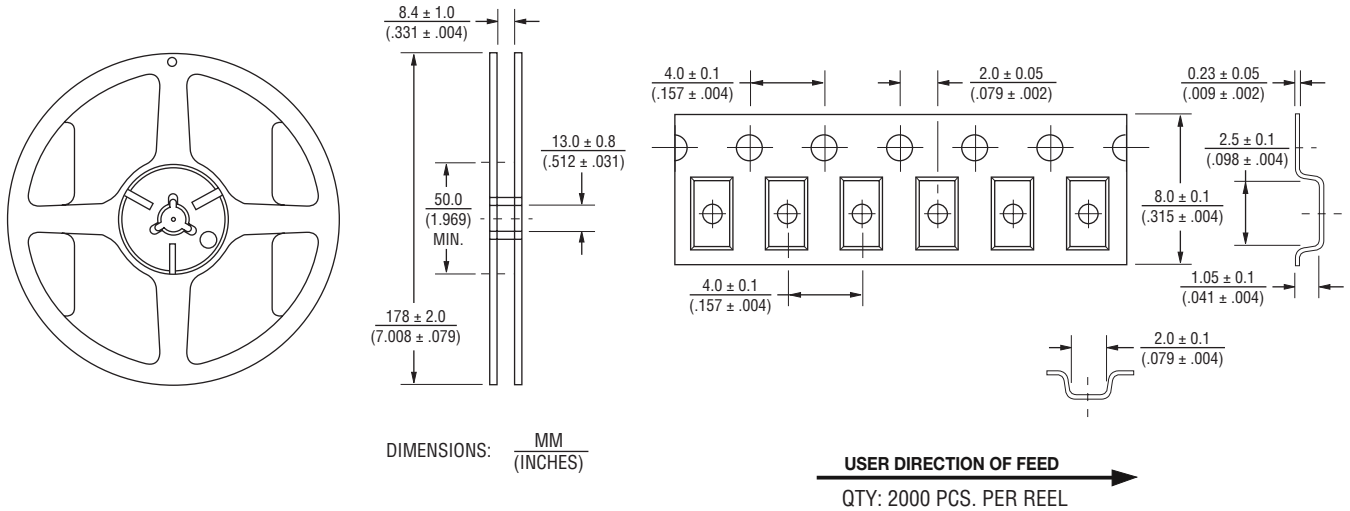
Users should verify actual device performance in their specific applications.

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# SRN2010TA Series - Semi-shielded Power Inductors

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## Packaging Specifications



REV. 06/22

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