


## 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\*\*

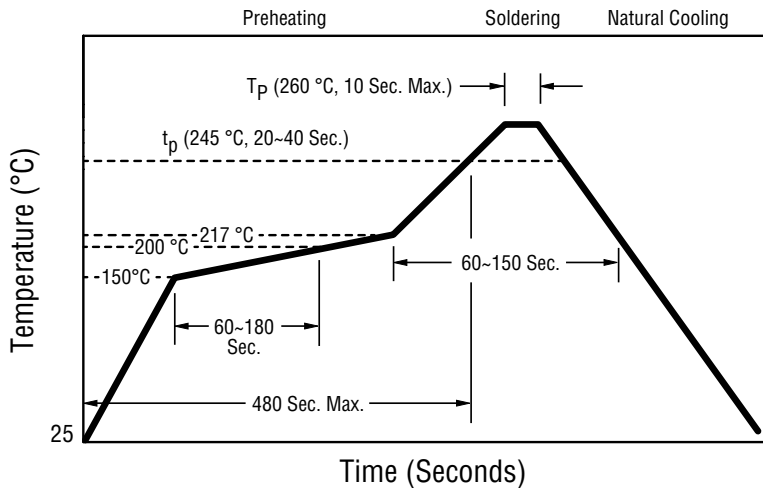
 This series is currently available but not recommended for new designs. Contact factory for alternative product information.

## SRN2010TA Series – Semi-shielded Power Inductors

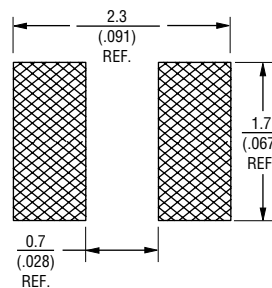
### Electrical Specifications @ 25 °C

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

### Soldering Profile



### Recommended Layout



DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

### Additional Information

Click these links for more information:



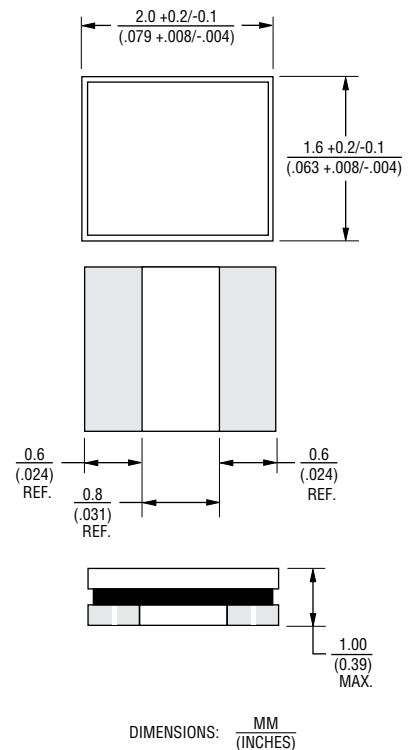
### General Specifications

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



DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$



**WARNING**  
**Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://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.

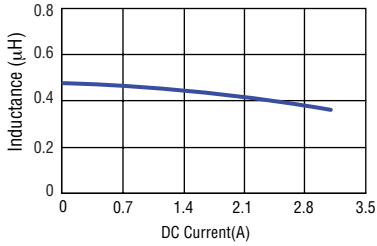
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# SRN2010TA Series – Semi-shielded Power Inductors

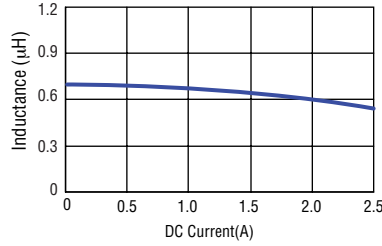


## Inductance vs. Current

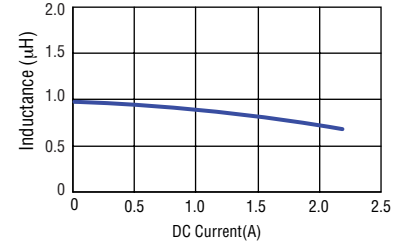
**SRN2010TA-R47Y**



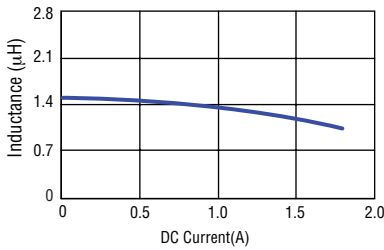
**SRN2010TA-R58Y**



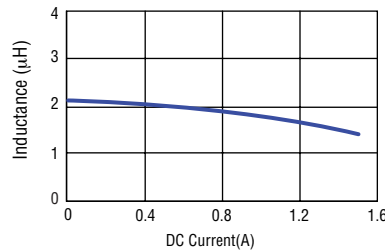
**SRN2010TA-1R0Y**



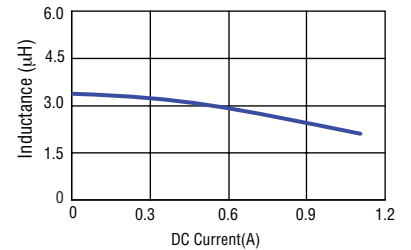
**SRN2010TA-1R5Y**



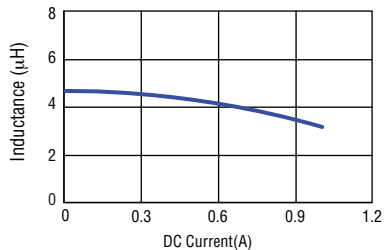
**SRN2010TA-2R2M**



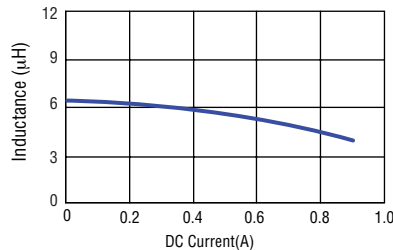
**SRN2010TA-3R3M**



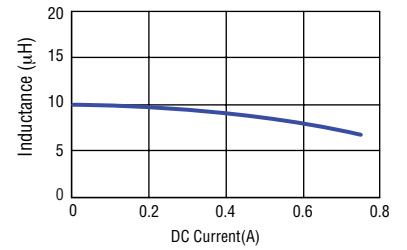
**SRN2010TA-4R7M**



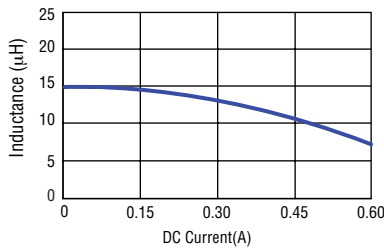
**SRN2010TA-6R8M**



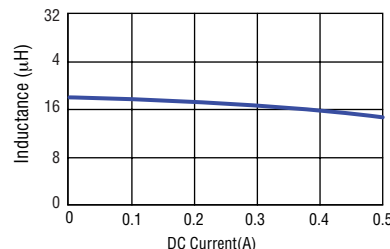
**SRN2010TA-100M**



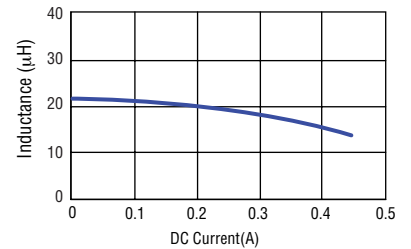
**SRN2010TA-150M**



**SRN2010TA-180M**



**SRN2010TA-220M**



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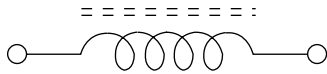
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**BOURNS®**

## Electrical Schematic



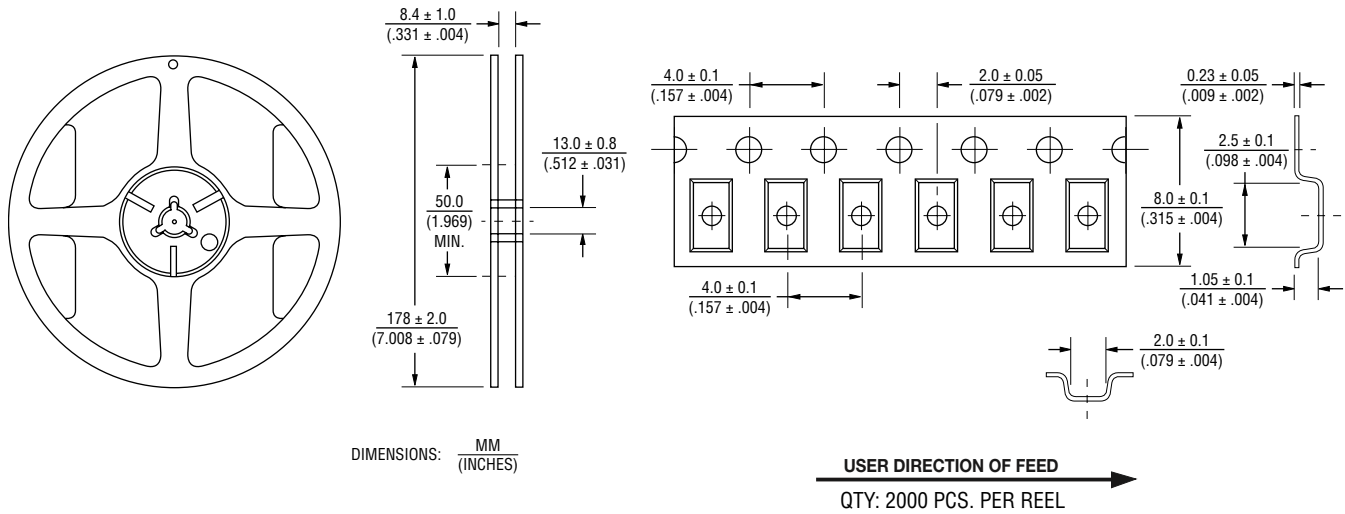
## How to Order

**SRN2010TA - R68Y**

Model \_\_\_\_\_

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

## Packaging Specifications



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