



## Features

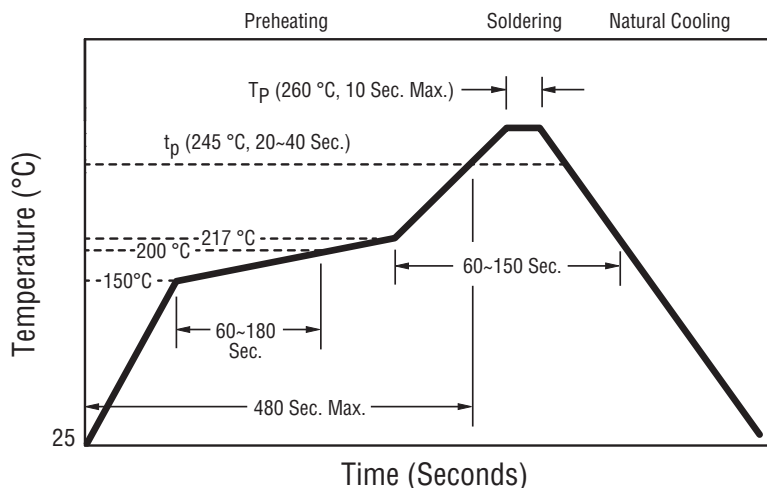
- Semi-shielded construction
- Inductance range: 0.47 to 22  $\mu$ H
- Rated current up to 2.3 A
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

## SRN2010TA Series - Semi-shielded Power Inductors

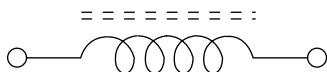
### Electrical Specifications @ 25 °C

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



### Electrical Schematic



### How to Order

SRN2010TA - R68Y

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

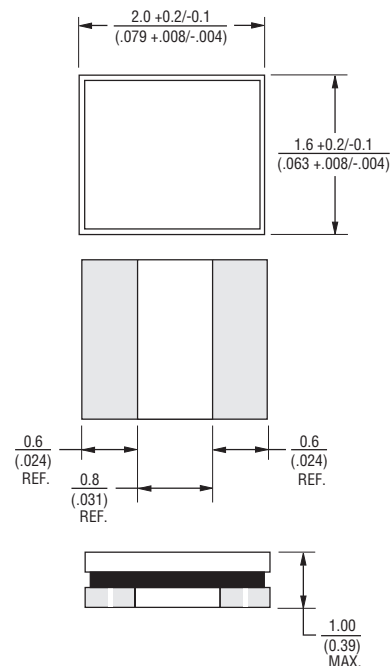
### General Specifications

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

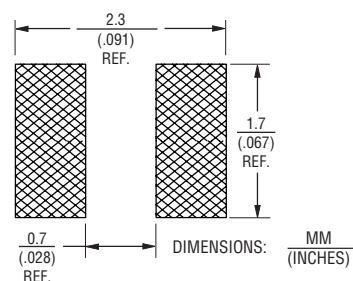
### Materials

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

### Product Dimensions



### 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.

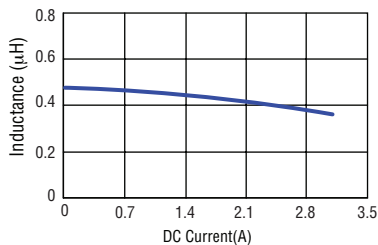
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# SRN2010TA Series - Semi-shielded Power Inductors

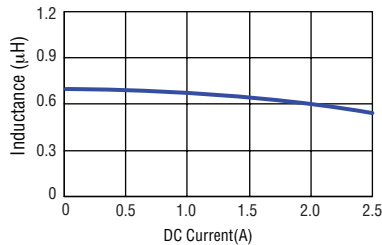
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## Inductance vs. Current

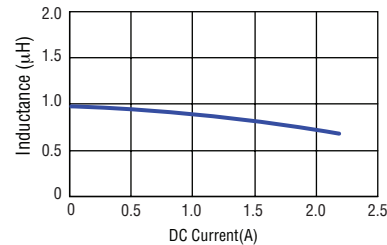
**SRN2010TA-R47Y**



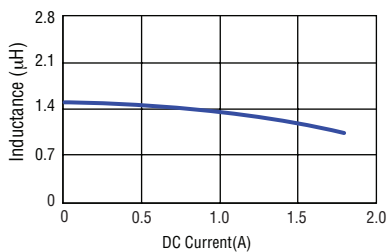
**SRN2010TA-R58Y**



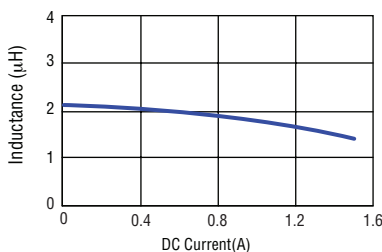
**SRN2010TA-1R0Y**



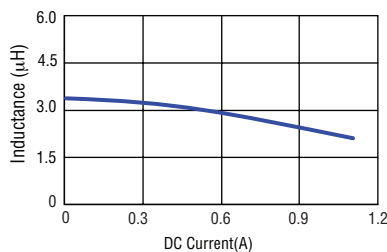
**SRN2010TA-1R5Y**



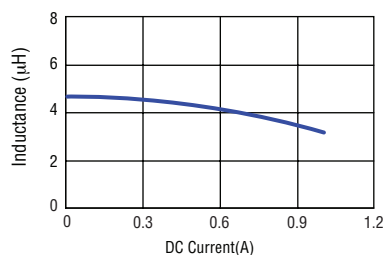
**SRN2010TA-2R2M**



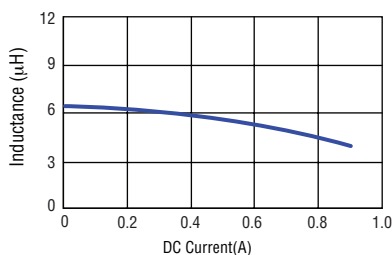
**SRN2010TA-3R3M**



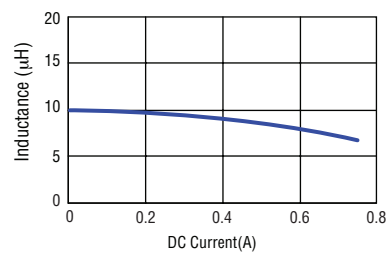
**SRN2010TA-4R7M**



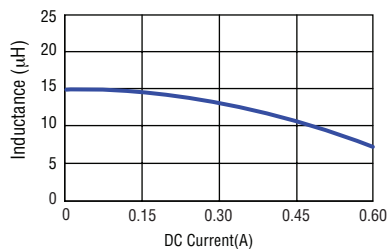
**SRN2010TA-6R8M**



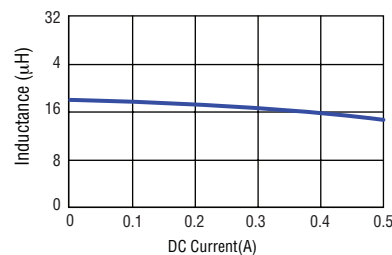
**SRN2010TA-100M**



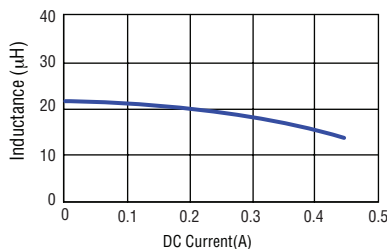
**SRN2010TA-150M**



**SRN2010TA-180M**



**SRN2010TA-220M**



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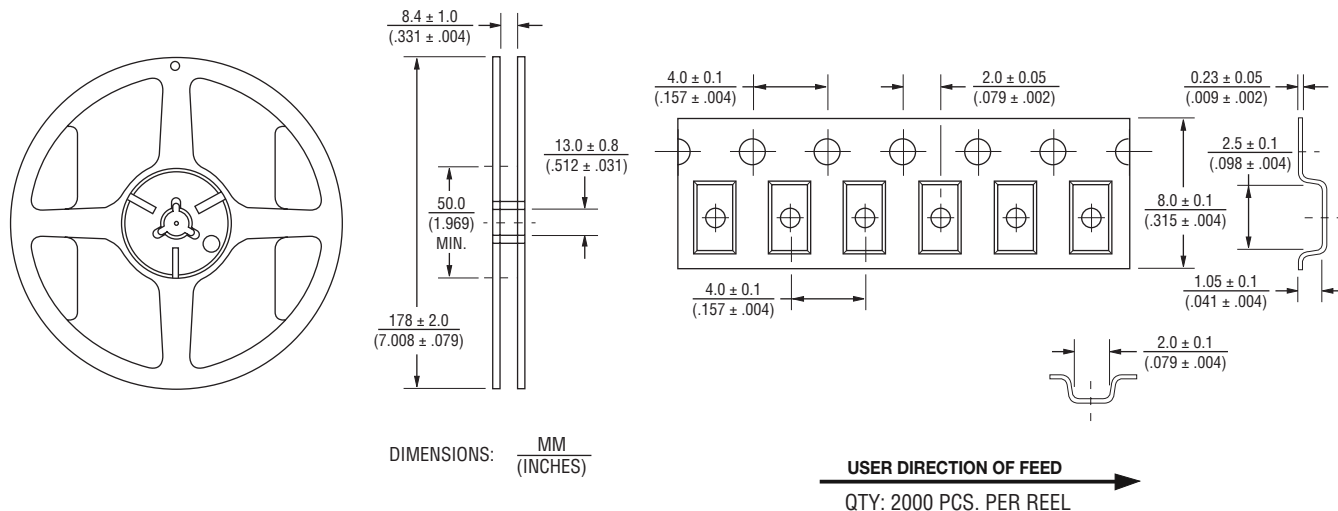
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# SRN2010TA Series - Semi-shielded Power Inductors

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## Packaging Specifications



REV. 04/20

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