




**THE DATASHEET OF  
SRN3010TA-6R8M**





### Features

- Semi-shielded construction
- Inductance range: 1 to 22  $\mu$ H
- Rated current up to 2.1 A
- AEC-Q200 qualified
- Low profile: 1.0 mm max.
- RoHS compliant\* and halogen free\*\*

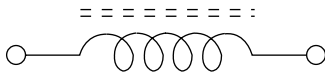
 This series is currently available but not recommended for new designs. Contact Bourns for alternative product information.

## SRN3010TA Series - Semi-shielded Power Inductors

### Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 1 MHz / 0.1 V		Q @ 1 MHz Min.	SRF (MHz) Typ.	DCR ( $\Omega$ ) $\pm 20$ %	I <sub>rms</sub> (A) Typ.	I <sub>sat</sub> (A) Typ.
	L ( $\mu$ H)	Tol. %					
SRN3010TA-1R0Y	1.0	$\pm 30$	10	170	0.055	2.1	1.8
SRN3010TA-1R5Y	1.5	$\pm 30$	12	150	0.07	1.9	1.5
SRN3010TA-2R2M	2.2	$\pm 20$	15	100	0.09	1.7	1.3
SRN3010TA-3R3M	3.3	$\pm 20$	18	85	0.13	1.5	1.1
SRN3010TA-4R7M	4.7	$\pm 20$	20	80	0.17	1.3	0.9
SRN3010TA-6R8M	6.8	$\pm 20$	20	55	0.26	1	0.77
SRN3010TA-100M	10	$\pm 20$	22	40	0.35	0.8	0.63
SRN3010TA-150M	15	$\pm 20$	22	35	0.51	0.7	0.54
SRN3010TA-220M	22	$\pm 20$	22	30	0.75	0.6	0.43

### Electrical Schematic

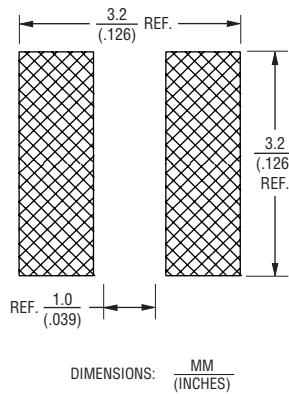


### How to Order

SRN3010TA - 2R2M

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

### Recommended Layout



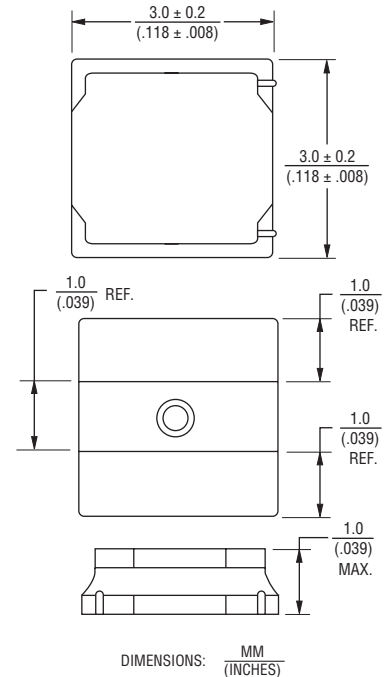
### General Specifications

Operating Temperature ..... -40 °C to +125 °C  
(Temperature rise included)  
Storage Temperature (Component) ..... -40 °C to +125 °C  
Temperature Rise ..... 40 °C at rated I<sub>rms</sub>  
Rated Current ..... Inductance drops 30 % at I<sub>sat</sub>  
Moisture Sensitivity Level ..... 1  
ESD Classification (HBM) ..... N/A

### Materials

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

### Product Dimensions



**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.

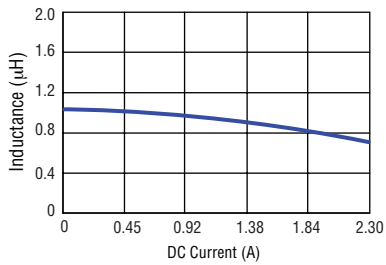
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# SRN3010TA Series - Semi-shielded Power Inductors

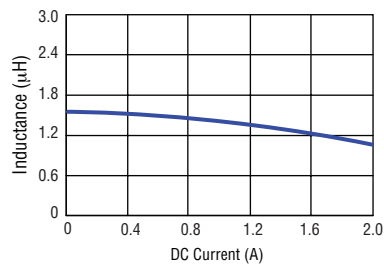


## Inductance vs. Current

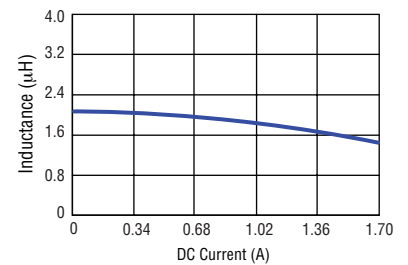
SRN3010TA-1R0Y



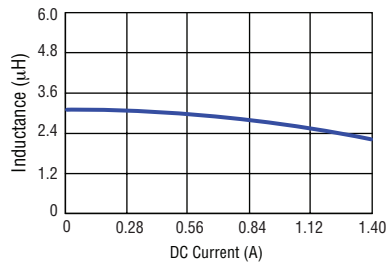
SRN3010TA-1R5Y



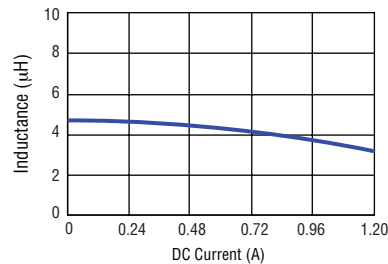
SRN3010TA-2R2M



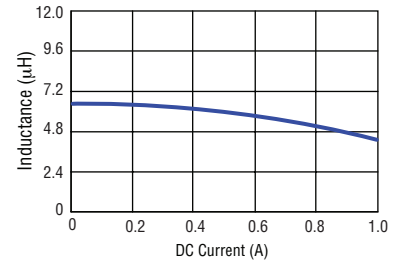
SRN3010TA-3R3M



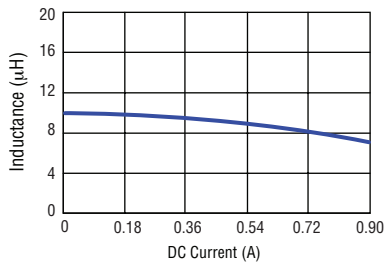
SRN3010TA-4R7M



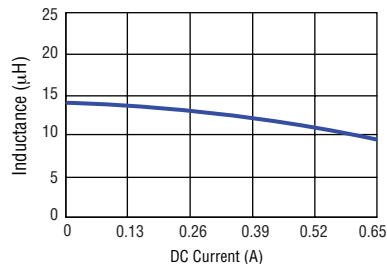
SRN3010TA-6R8M



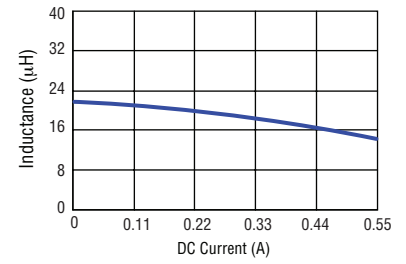
SRN3010TA-100M



SRN3010TA-150M



SRN3010TA-220M



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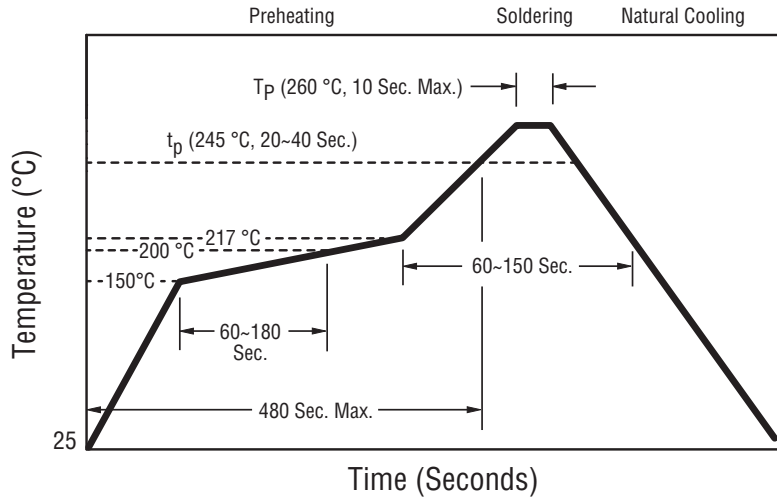
Users should verify actual device performance in their specific applications.

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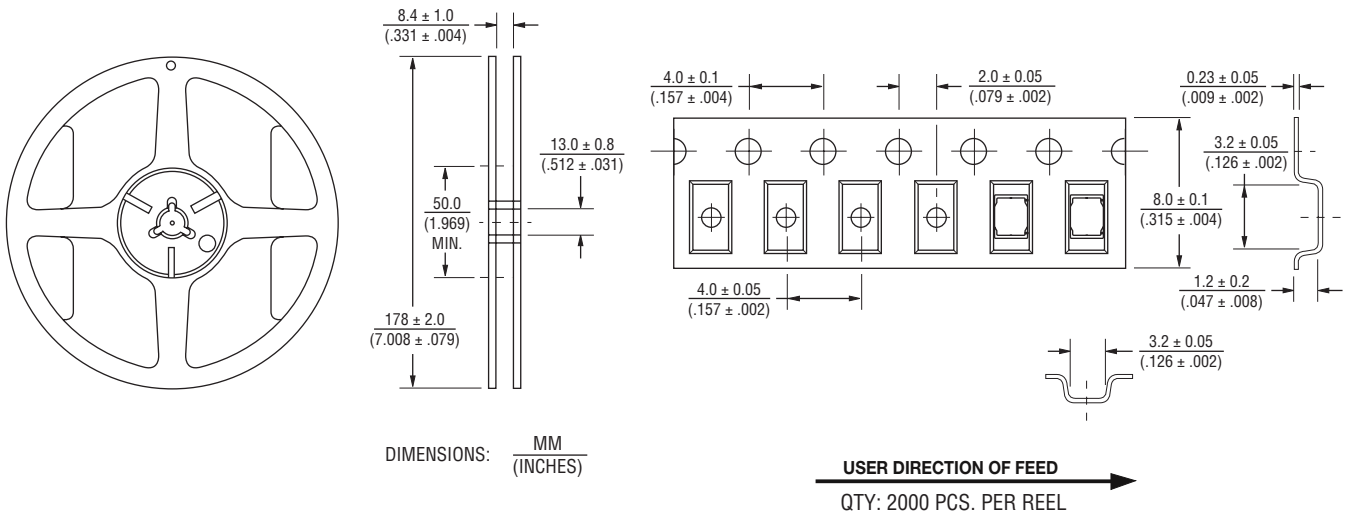
# SRN3010TA Series - Semi-shielded Power Inductors

**BOURNS®**

## Soldering Profile



## Packaging Specifications



REV. 06/22

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