

### **Features**

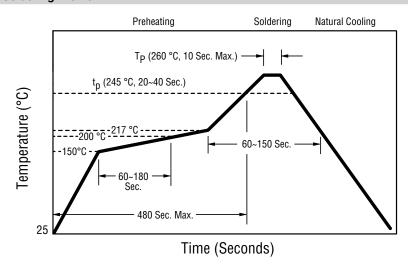
- Semi-shielded construction
- Inductance range: 1 to 22 µH
- Rated current up to 2 A
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

# SRN3012TA Series - Semi-shielded Power Inductors

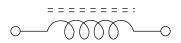
#### Electrical Specifications @ 25 °C

	Inductance @ 1 MHz / 0.1 V		Q (Min.)	SRF (MHz)	DCR (Ω)	Irms	Isat
Bourns Part No.	<b>L (μH)</b>	Tol. %	@ 1 MHz	Typ.	±20 %	(A)	(A)
SRN3012TA-1R0Y	1.0	±30	10	150	0.042	2.00	2.15
SRN3012TA-1R5Y	1.5	±30	15	130	0.056	1.85	1.7
SRN3012TA-2R2M	2.2	±20	15	90	0.08	1.7	1.5
SRN3012TA-3R3M	3.3	±20	15	70	0.1	1.55	1.2
SRN3012TA-4R7M	4.7	±20	18	55	0.13	1.3	1.05
SRN3012TA-6R8M	6.8	±20	20	45	0.18	1.05	0.9
SRN3012TA-100M	10	±20	20	40	0.245	0.89	0.76
SRN3012TA-150M	15	±20	20	35	0.386	0.74	0.62
SRN3012TA-220M	22	±20	22	25	0.58	0.61	0.49

### **Soldering Profile**



### **Electrical Schematic**



#### **How to Order**

#### **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 Irms Rated Current

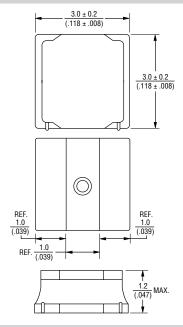
............ Inductance drops 30 % at Isat Failure In Time (FIT) .......24.7/10° hours Mean Time Between Failures (MTBF)

.....40.4 x 10<sup>6</sup> hours

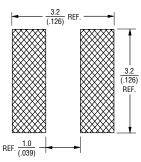
#### Materials

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

#### **Product Dimensions**



#### **Recommended Layout**



DIMENSIONS:

MM INCHES)

WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

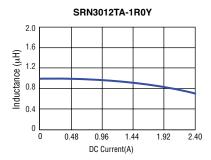
- ${}^{\star}\text{RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.}$
- \*\*Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less. Specifications are subject to change without notice.

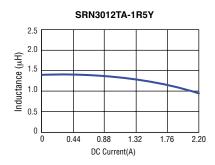
Users should verify actual device performance in their specific applications.

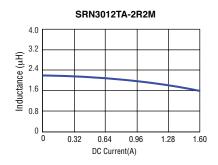
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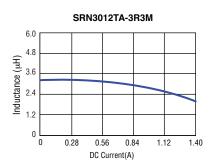
# **SRN3012TA Series - Semi-shielded Power Inductors**

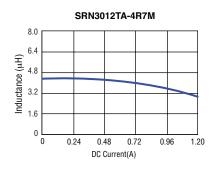
### Inductance vs. Current

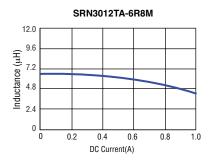


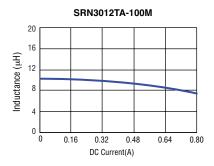


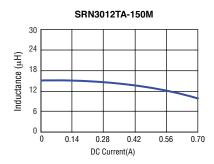


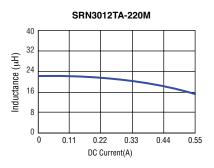




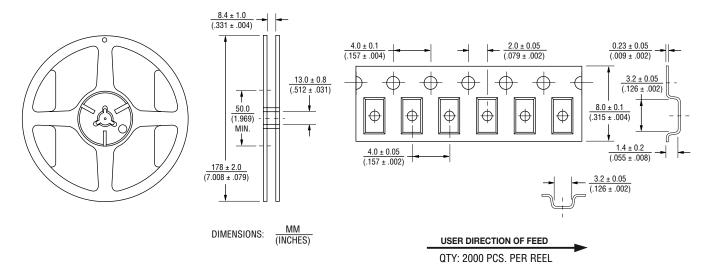








## **Packaging Specifications**



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