

### **Features**

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

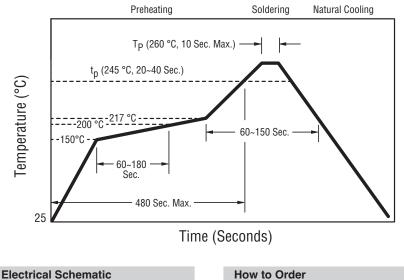
This series is currently available but not recommended for new designs. Contact Bourns for alternative product information.

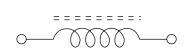
# SRN3012TA Series - Semi-shielded Power Inductors

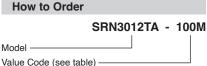
#### Electrical Specifications @ 25 °C

	Inductance @ 1 MHz / 0.1 V		Q (Min.)	SRF (MHz)	DCR (Ω)	Irms	Isat
Bourns Part No.	<b>L (</b> μ <b>H)</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**









\*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 (CI) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (CI) 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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### **General Specifications**

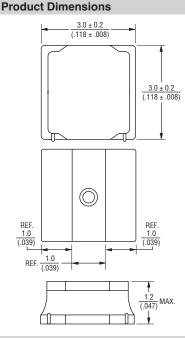
#### **Operating Temperature**

(Temperature rise included) Storage Temperature .. -55 °C to +125 °C Temperature Rise .....40 °C at rated Irms Rated Current

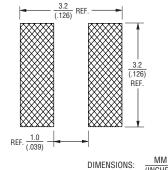
..... Inductance drops 30 % at Isat Failure In Time (FIT) ...... 24.7/10º hours Mean Time Between Failures (MTBF)

#### Materials

Ferrite
Enameled copper
Sn
Magnetic epoxy resin
2000 pcs. per 7-inch reel



#### **Recommended Layout**



(INCHES)

# SRN3012TA Series - Semi-shielded Power Inductors

## BOURNS

SRN3012TA-2R2M

4.0

3.2

2.4

1.6 0.8

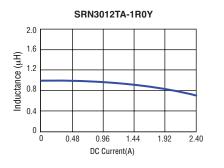
0

0

0.32

Inductance (µH)

#### Inductance vs. Current



SRN3012TA-3R3M

0.84

1.12

1.40

6.0

4.8

3.6

2.4

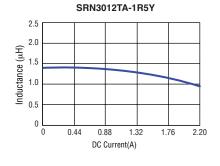
1.2

0

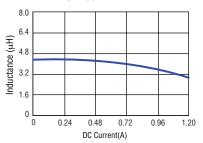
0

0.28

Inductance (µH)



SRN3012TA-4R7M



SRN3012TA-6R8M

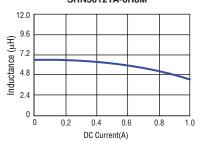
DC Current(A)

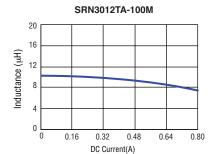
0.96

1.28

1.60

0.64

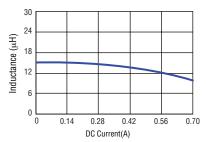




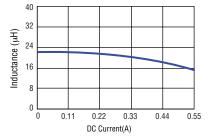
0.56

DC Current(A)





SRN3012TA-220M

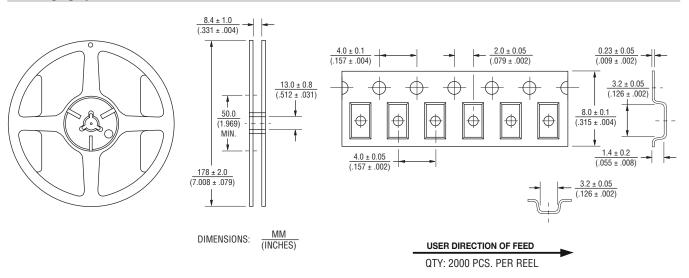


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# SRN3012TA Series - Semi-shielded Power Inductors

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**Packaging Specifications** 



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