



Features

- Semi-shielded construction
- Inductance range: 0.47 to 22 μ H
- Rated current up to 3.2 A
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

Applications

- Automotive systems:
 - Driver assistant
 - Information
 - Entertainment
 - Lighting
- Digital video cameras
- HDDs
- Smartphones
- Televisions, LCD displays
- DC/DC converters
- Power supplies

SRN4012TA Series - Semi-shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 100 kHz / 1 V		Q (Min.) @ 100 kHz	SRF (MHz) Typ.	DCR (Ω) ± 20 %	I _{rms} (A)	I _{sat} (A)
	L (μ H)	Tol. %					
SRN4012TA-R47M	0.47	± 20	6	140	0.025	3.2	4
SRN4012TA-1R0M	1.0	± 20	6	100	0.042	2.2	2.8
SRN4012TA-1R5M	1.5	± 20	6	90	0.05	2	2.2
SRN4012TA-2R2M	2.2	± 20	6	70	0.06	1.9	1.65
SRN4012TA-3R3M	3.3	± 20	6	60	0.07	1.7	1.4
SRN4012TA-4R7M	4.7	± 20	6	45	0.095	1.5	1.2
SRN4012TA-6R8M	6.8	± 20	6	35	0.125	1.3	0.9
SRN4012TA-100M	10	± 20	10	30	0.18	1.1	0.8
SRN4012TA-150M	15	± 20	10	24	0.26	0.75	0.65
SRN4012TA-220M	22	± 20	10	18	0.4	0.62	0.5

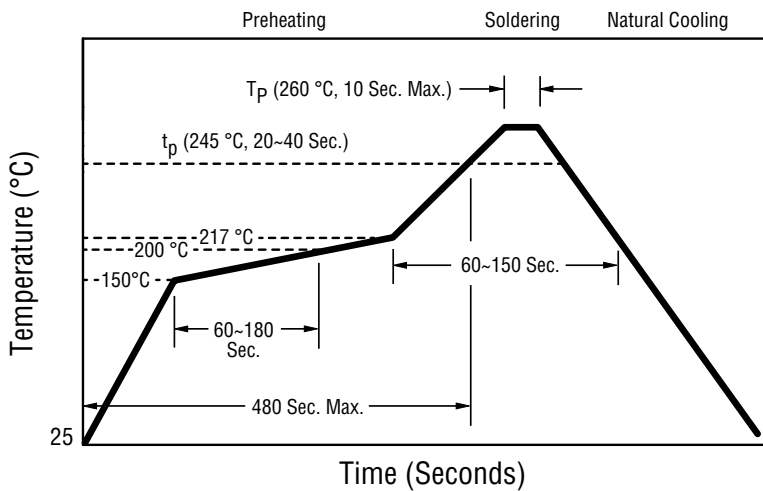
General Specifications

Operating Temperature -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature .. -40 °C to +125 °C
 Temperature Rise 40 °C at rated I_{rms}
 Rated Current
 Inductance drops 30 % at I_{sat}
 Failure In Time (FIT) 24.7/10⁹ hours
 Mean Time Between Failures (MTBF)
 40.4 x 10⁶ hours

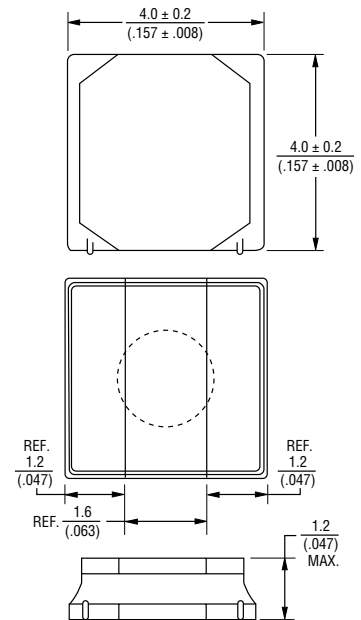
Materials

Core Ferrite
 Wire Enameled copper
 Terminal Finish Sn
 Coating Magnetic epoxy resin
 Packaging 4500 pcs. per 13-inch reel

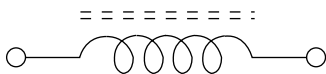
Soldering Profile



Product Dimensions



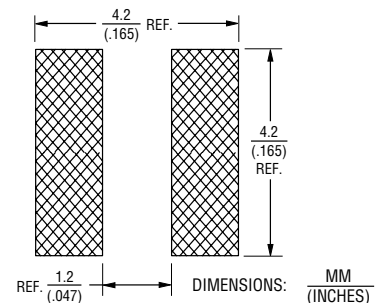
Electrical Schematic



How to Order

SRN4012TA - 100M
 Model _____
 Value Code (see table) _____

Recommended Layout



*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.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

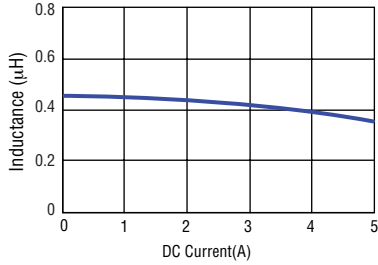
Users should verify actual device performance in their specific applications.

SRN4012TA Series - Semi-shielded Power Inductors

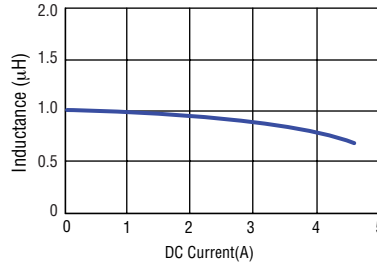
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Inductance vs. Current

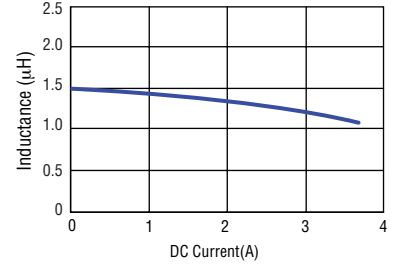
SRN4012TA-R47M



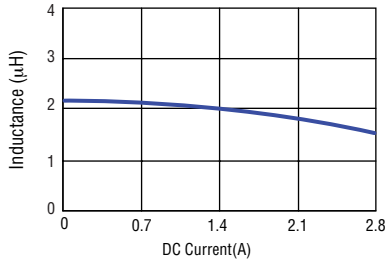
SRN4012TA-1R0M



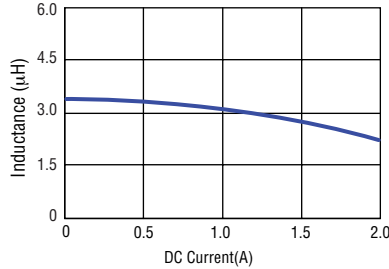
SRN4012TA-1R5M



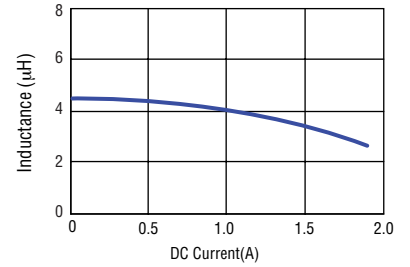
SRN4012TA-2R2M



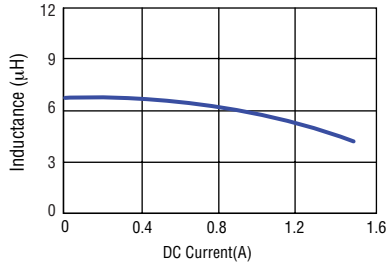
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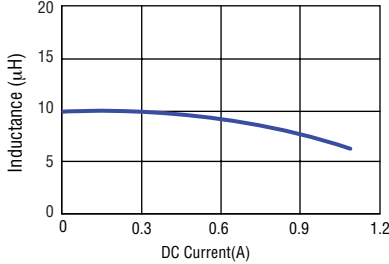
SRN4012TA-4R7M



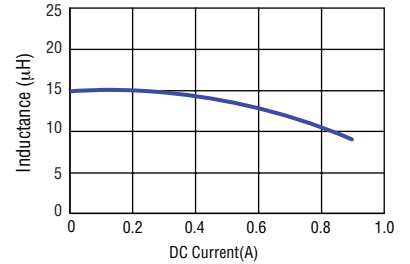
SRN4012TA-6R8M



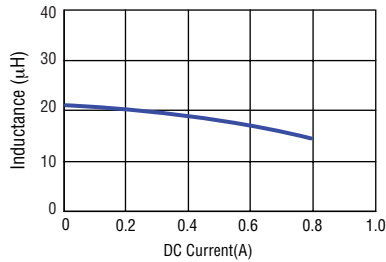
SRN4012TA-100M



SRN4012TA-150M



SRN4012TA-220M

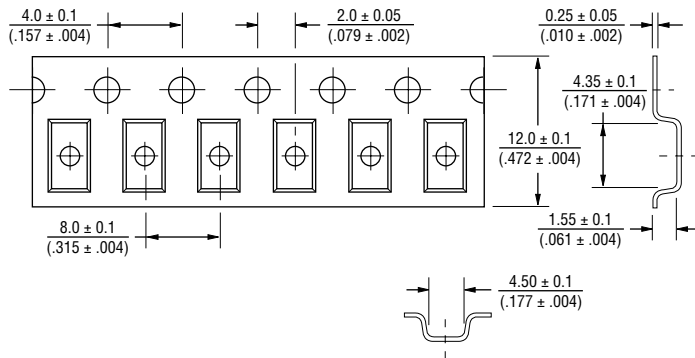
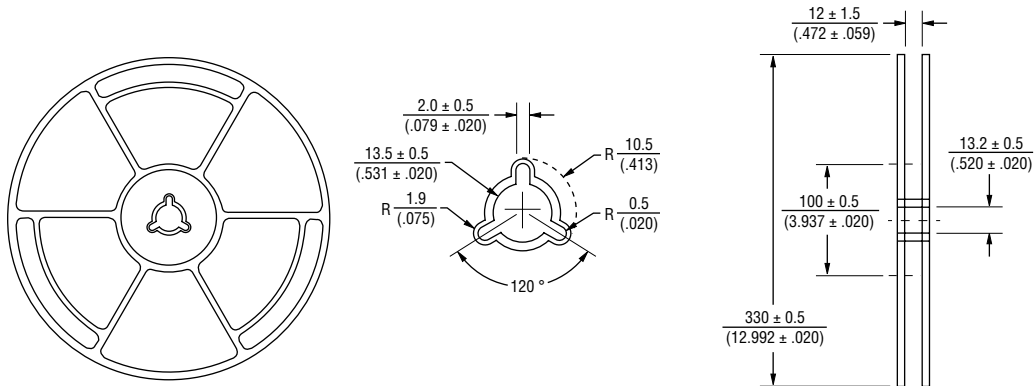


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Packaging Specifications



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

USER DIRECTION OF FEED →

QTY: 4500 PCS. PER REEL