



Features

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

Applications

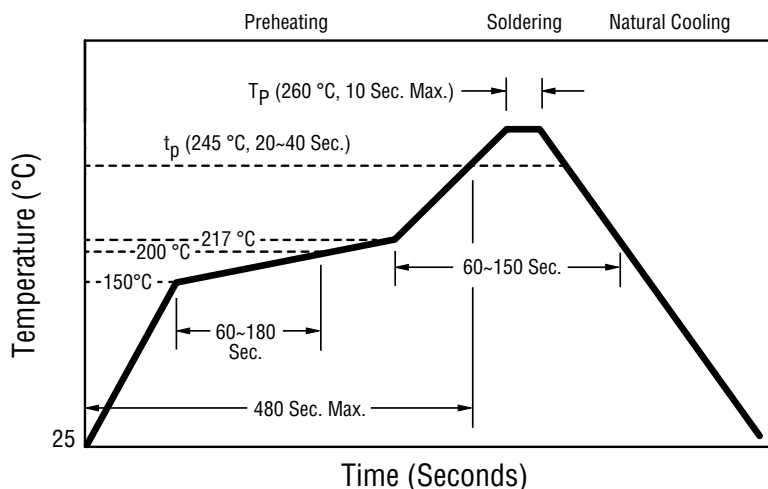
- Automotive systems:
 - Driver assistant
 - Infotainment
 - Lighting
- DC/DC converters
- Power supplies
- Digital video cameras
- HDDs
- Smartphones
- Televisions, LCD displays

SRN3012TA Series - Semi-shielded Power Inductors

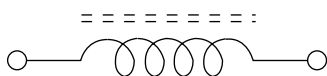
Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 1 MHz / 0.1 V		Q (Min.) @ 1 MHz	SRF (MHz) Typ.	DCR (Ω) $\pm 20\%$	I _{rms} (A)	I _{sat} (A)
	L (μ H)	Tol. %					
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

SRN3012TA - 100M

Model _____

Value Code (see table) _____

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

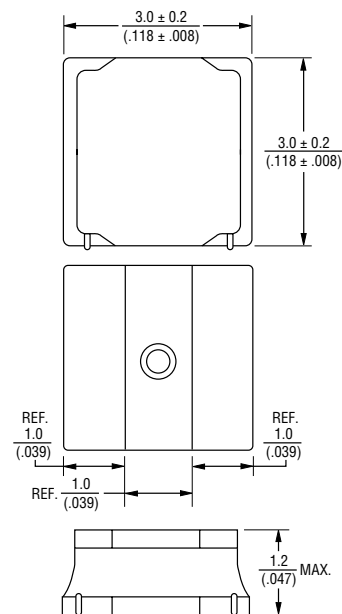
Wire Enameled copper

Terminal Finish Sn

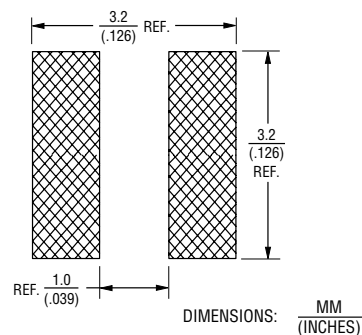
Coating Magnetic epoxy resin

Packaging 2000 pcs. per 7-inch reel

Product Dimensions



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.

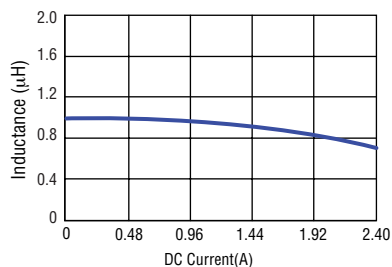
Users should verify actual device performance in their specific applications.

SRN3012TA Series - Semi-shielded Power Inductors

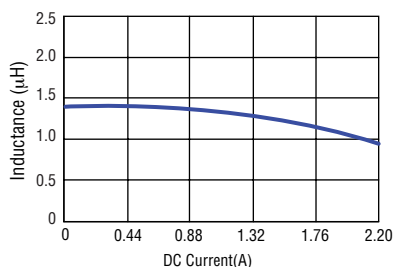
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Inductance vs. Current

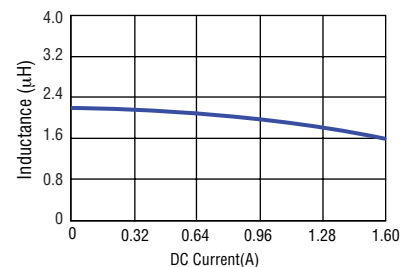
SRN3012TA-1R0Y



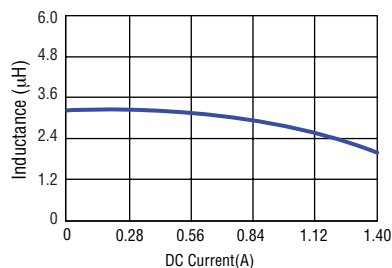
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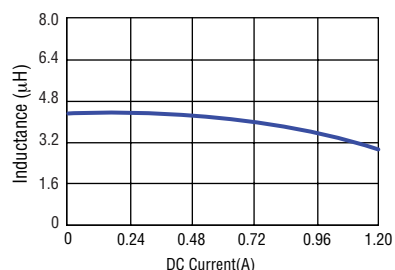
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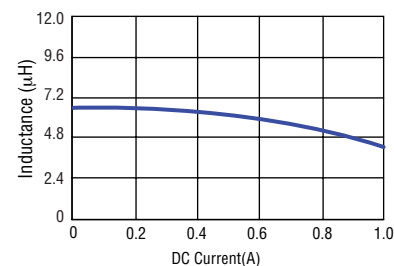
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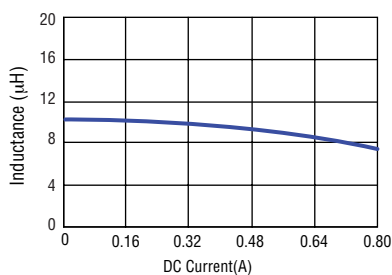
SRN3012TA-4R7M



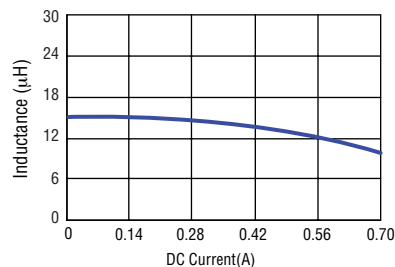
SRN3012TA-6R8M



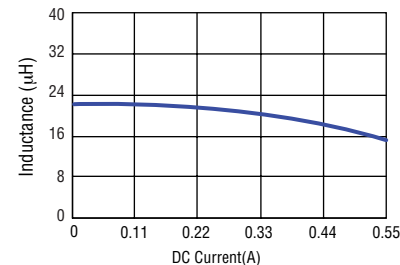
SRN3012TA-100M



SRN3012TA-150M



SRN3012TA-220M



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Packaging Specifications

