

Features

- Semi-shielded construction
- Low profile: 1.2 mm
- Inductance range: 0.47 to 22 μ H
- Rated current up to 3.2 A
- RoHS compliant* and halogen free**

Applications

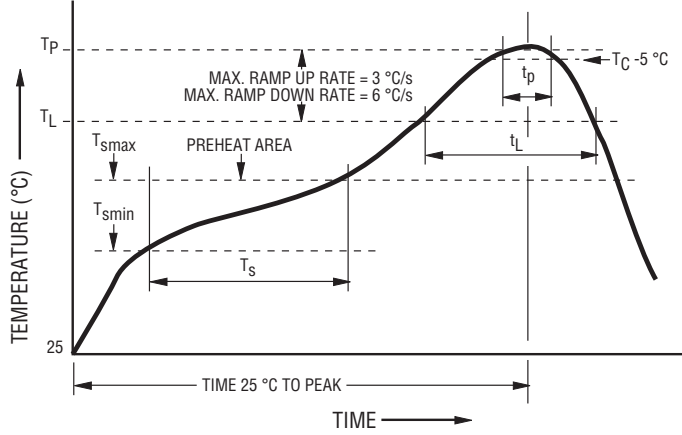
- DC-DC converters
- Notebook computers
- Digital video cameras
- HDDs
- Cellphones
- Televisions, LCD displays

SRN4012T Series - Semi-shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 100 KHz / 1 V		Q (Min.) @ 100 kHz / 1 V	SRF (MHz) Typ.	DCR (Ω) ± 20 %	I _{rms} (A)	I _{sat} (A)
	L (μ H)	Tol. %					
SRN4012T-R47M	0.47	± 20	6	140	0.025	3.2	4
SRN4012T-1R0M	1.0	± 20	6	100	0.042	2.2	2.8
SRN4012T-1R5M	1.5	± 20	6	90	0.05	2	2.2
SRN4012T-2R2M	2.2	± 20	6	70	0.06	1.9	1.65
SRN4012T-3R3M	3.3	± 20	6	60	0.07	1.7	1.4
SRN4012T-4R7M	4.7	± 20	6	45	0.095	1.5	1.2
SRN4012T-6R8M	6.8	± 20	6	35	0.125	1.3	0.9
SRN4012T-100M	10	± 20	10	30	0.18	1.1	0.8
SRN4012T-150M	15	± 20	10	24	0.26	0.75	0.65
SRN4012T-220M	22	± 20	10	18	0.4	0.62	0.5

Soldering Profile



Profile Feature	Pb-Free Assembly
Preheat / Soak:	
Temperature Min. (T_{smin})	150 °C
Temperature Max. (T_{smax})	200 °C
Time (t_s) from (T_{smin} to T_{smax})	60~120 seconds
Ramp Up Rate (T_L to T_p)	3 °C / second max.
Liquidous Temperature (T_L)	217 °C
Time (t_L) maintained above T_L	60~150 seconds
Classification Temperature (T_C)	260 °C
Time (t_p) within 5 °C of the specified classification temperature (T_C)	< 30 seconds
Ramp Down Rate (T_p to T_L)	6 °C / second max.
Time 25 °C to Peak Temperature	8 minutes max.

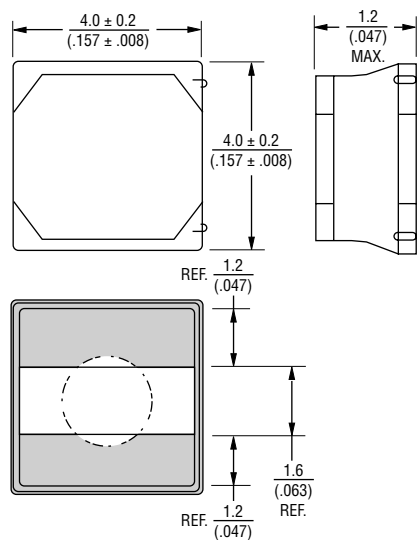
General Specifications

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}

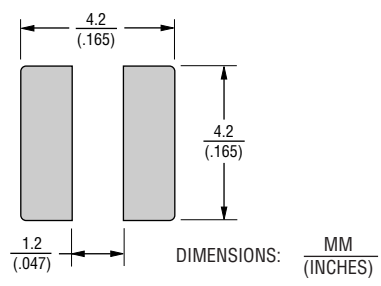
Materials

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

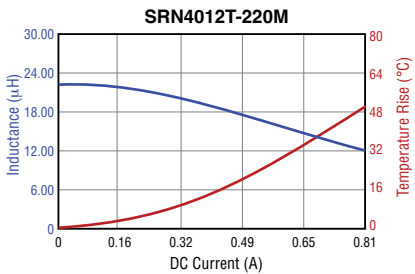
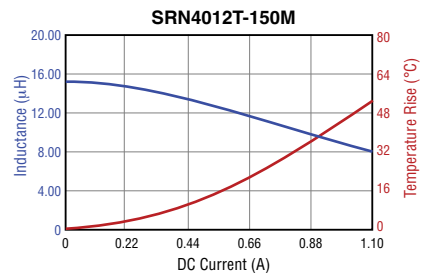
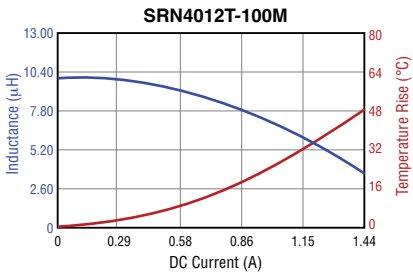
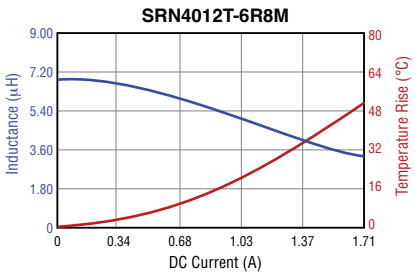
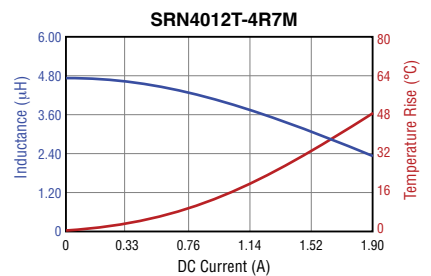
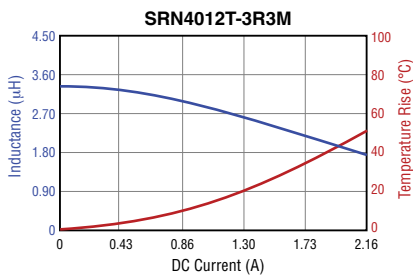
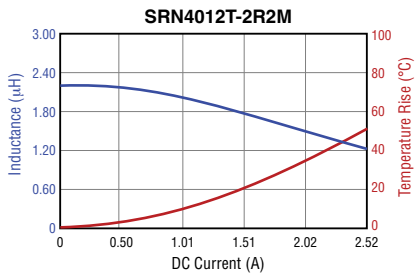
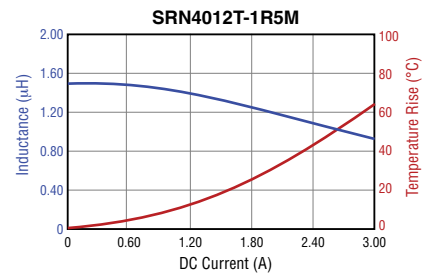
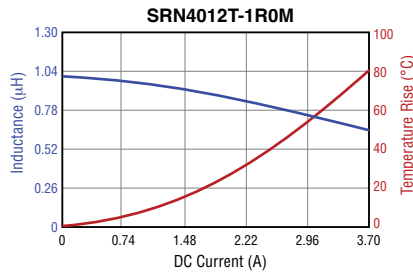
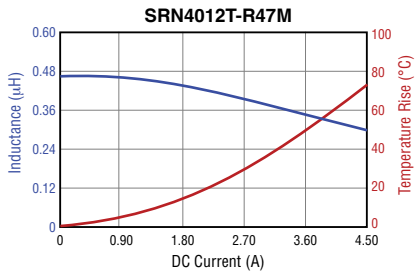
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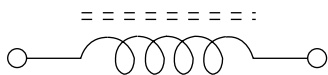
SRN4012T Series - Semi-shielded Power Inductors

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Electrical Schematic



How to Order

SRN4012T - R47M

Model _____
Value Code (see table) _____

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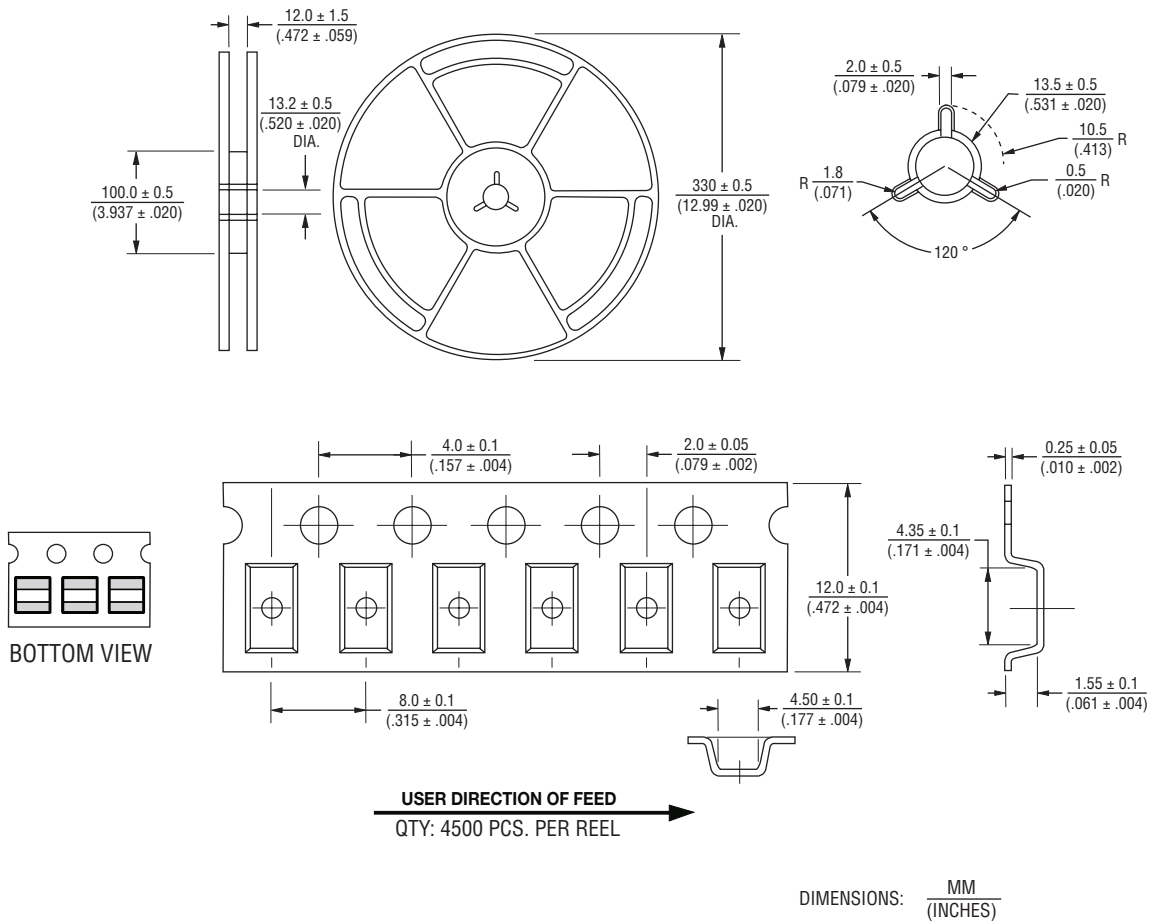
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SRN4012T Series - Semi-shielded Power Inductors

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Packaging Specifications



REV. 05/26

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