

Features

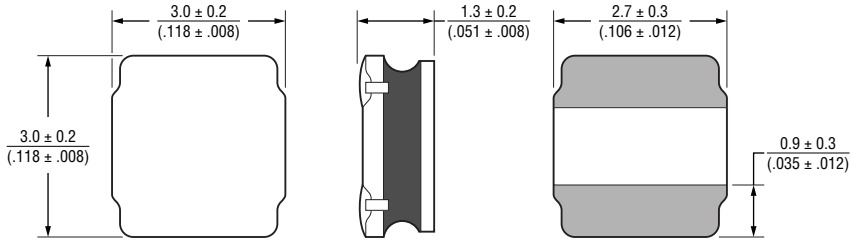
- Semi-shielded construction
- Miniature size
- RoHS compliant* and halogen free**

SRN3015C Series – Semi-Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 100 kHz / 1 V		Q @ 100 kHz / 1 V Typ.	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	Irms (A) Typ.	Isat (A) Typ.
	L (µH)	Tol. %						
SRN3015C-R24M	0.24	20	3	220	13	16	5.0	6.0
SRN3015C-R47M	0.47	20	10	160	18	22	3.7	4.3
SRN3015C-R68M	0.68	20	10	130	23	28	3.5	3.8
SRN3015C-1R0M	1.0	20	10	100	30	36	3.0	3.0
SRN3015C-1R5M	1.5	20	10	90	36	43	2.7	2.4
SRN3015C-2R2M	2.2	20	10	72	60	72	2.5	2.1
SRN3015C-3R3M	3.3	20	10	53	80	96	2.2	1.7
SRN3015C-4R7M	4.7	20	10	47	112	134	1.9	1.5
SRN3015C-5R6M	5.6	20	10	40	135	162	1.8	1.4
SRN3015C-6R8M	6.8	20	10	36	172	206	1.7	1.3
SRN3015C-100M	10	20	10	31	220	264	1.5	1.0
SRN3015C-150M	15	20	15	25	310	372	1.2	0.85
SRN3015C-180M	18	20	15	23	380	456	1.1	0.73
SRN3015C-220M	22	20	15	20	450	540	1.0	0.68
SRN3015C-330M	33	20	15	16	780	940	0.85	0.57
SRN3015C-470M	47	20	15	14	1200	1440	0.7	0.46
SRN3015C-101M	100	20	10	13	3400	4080	0.4	0.33

Product Dimensions



Note: Top and side view dimensions do not include termination.
For maximum overall dimensions including termination, add 0.1 mm.

DIMENSIONS: MM (INCHES)

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

* 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 (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

General Specifications

Operating Temperature
..... -55 °C to +125 °C
(Temperature rise included)
Storage Temperature
(Component on board)
..... -55 °C to +125 °C
Temperature Rise ... 40 °C at rated Irms[1]
Rated Current
..... Inductance drops 30 % at Isat
Moisture Sensitivity Level 1
ESD Classification (HBM) ..... N/A

[1] Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

Materials

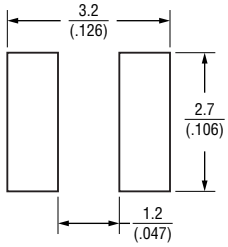
Core ..... Ferrite
Wire ..... Enameled copper
Terminal Finish ..... Ag/Ni/Sn
Coating ..... Magnetic resin
Packaging ..... 2000 pcs. per 7-inch reel

How to Order

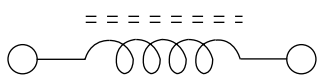
SRN3015C - 1R0M

Model
Value Code (see table)

Recommended Layout

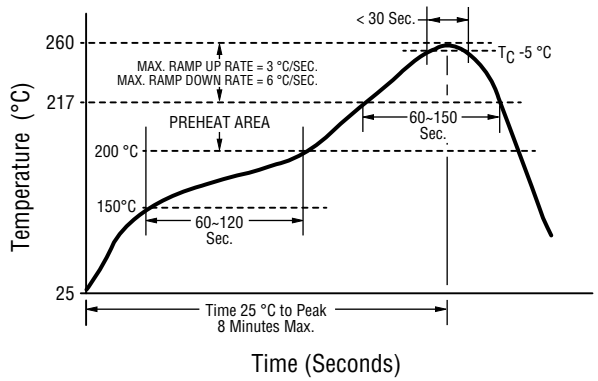


Electrical Schematic



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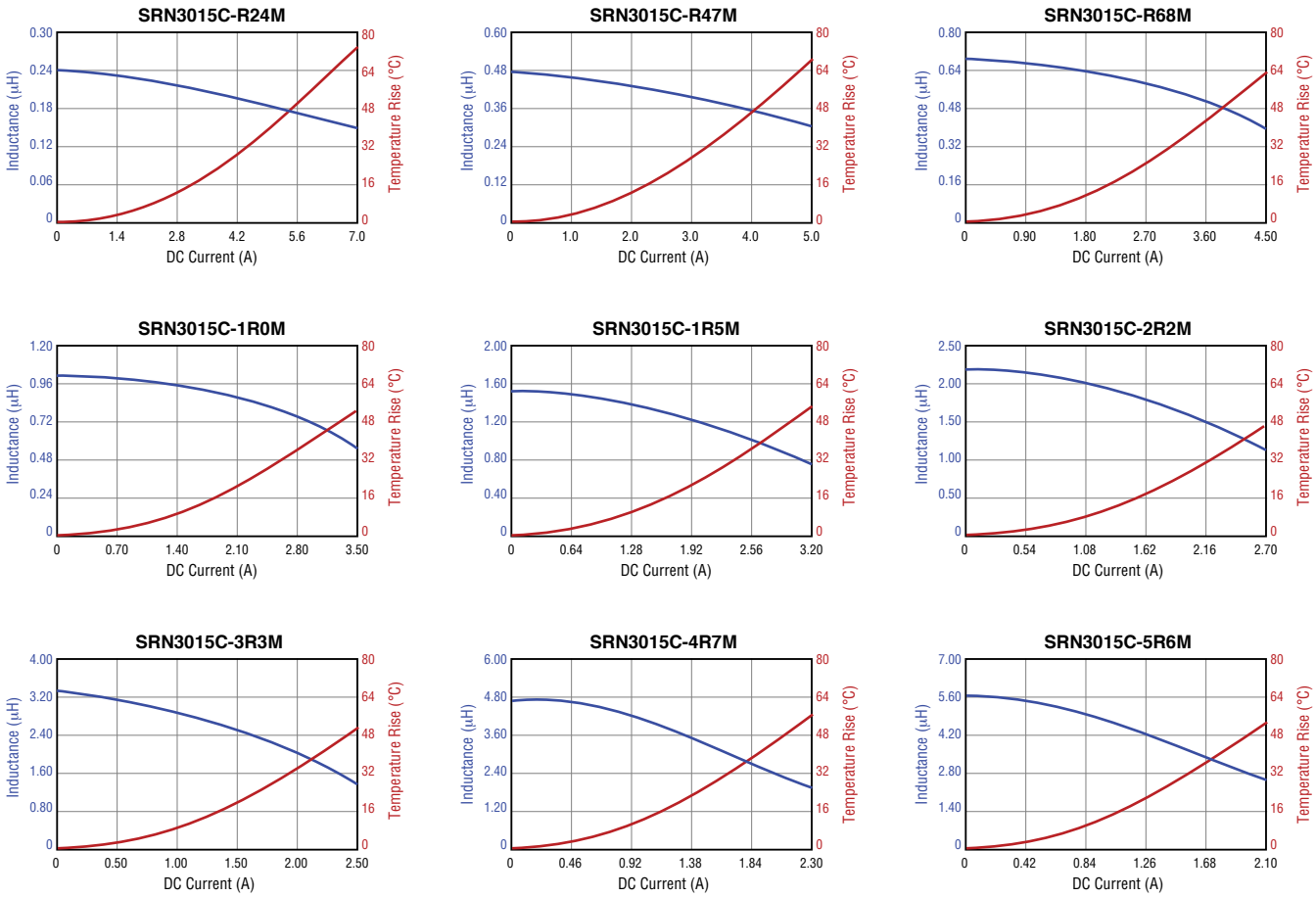
Soldering Profile



REFLOW TIMES: 3 TIMES MAX.

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

L vs. I Charts

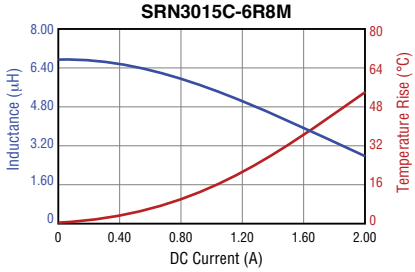


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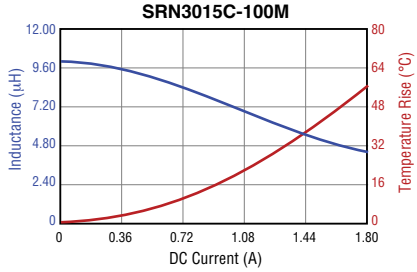
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L vs. I Charts (continued)

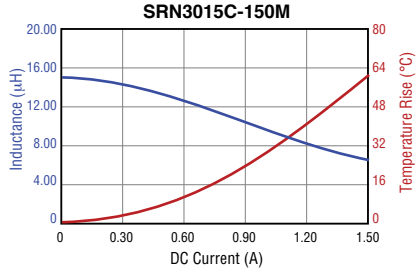
SRN3015C-6R8M



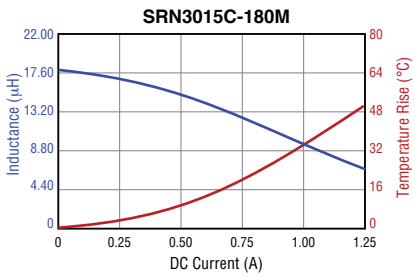
SRN3015C-100M



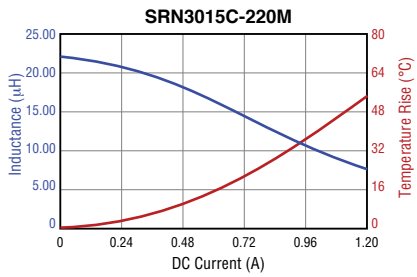
SRN3015C-150M



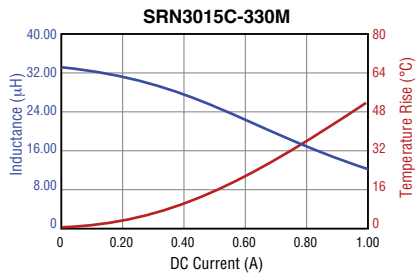
SRN3015C-180M



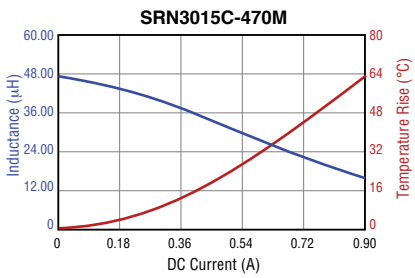
SRN3015C-220M



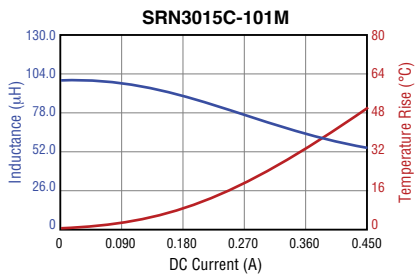
SRN3015C-330M



SRN3015C-470M



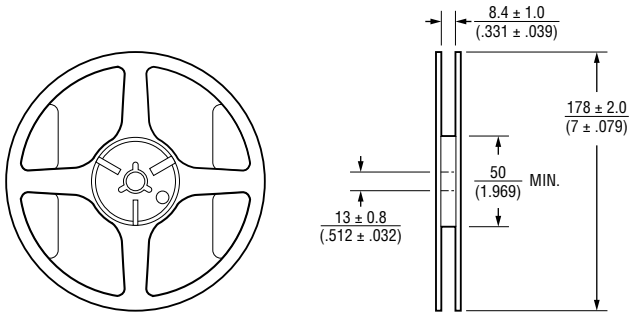
SRN3015C-101M



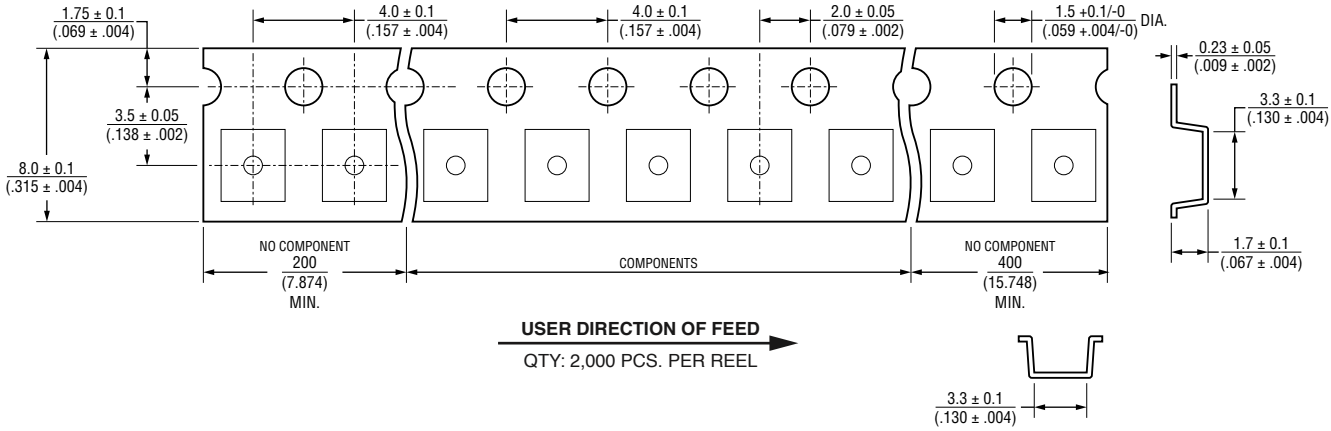
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Packaging Specifications



DIMENSIONS: MM / (INCHES)



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