

Features

- Shielded construction
- Metal alloy powder core
- High heating current
- Low radiation
- Low buzz noise
- RoHS compliant* and halogen free**

SRP2313CC Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 100 kHz / 1 V		Q Min.	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	Irms (A) Typ.	Isat (A) Typ.
	L (µH)	Tol. %						
SRP2313CC-R68M	0.68	20	30	35	0.6	0.72	75	90
SRP2313CC-1R0M	1.0	20	60	23	0.8	0.95	70	60
SRP2313CC-1R5M	1.5	20	60	21	1.0	1.15	62	52
SRP2313CC-2R2M	2.2	20	60	19	1.05	1.25	58	48
SRP2313CC-3R3M	3.3	20	60	15	1.5	1.75	49	41
SRP2313CC-4R7M	4.7	20	40	11	1.9	2.2	47	38
SRP2313CC-5R6M	5.6	20	40	10	2.3	2.7	43	37
SRP2313CC-6R8M	6.8	20	40	9	2.7	3.1	40	36
SRP2313CC-100M	10	20	40	7	3.8	4.15	33	28
SRP2313CC-220M	22	20	30	5	9.2	11	22	15
SRP2313CC-230M	23	20	30	5	9.2	11	22	15
SRP2313CC-330M	33	20	30	4	13.5	15.4	19	12
SRP2313CC-470M	47	20	20	3.5	17.3	20.8	17	12
SRP2313CC-680M	68	20	20	3	26.2	29.5	14	12
SRP2313CC-101M	100	20	20	2	36	40	11	9
SRP2313CC-151M	150	20	20	2	67	80	8	7

Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

General Specifications

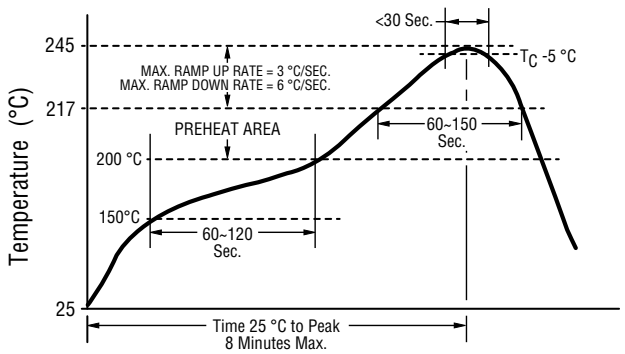
Operating Temperature
..... -40 °C to +125 °C
(Temperature rise included)
Storage Temperature (Component)
..... -40 °C to +125 °C
Temperature Rise .....40 °C at rated I_{rms}[1]
Rated Current
..... Inductance drops 30 % at I_{sat}
Moisture Sensitivity Level.....1
ESD Classification (HBM).....N/A

[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.....Metal alloy powder
Wire .....Enameled copper
Terminal Finish ..... Sn
Packaging..... 80 pcs. per 13-inch reel

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)	245 °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.

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.

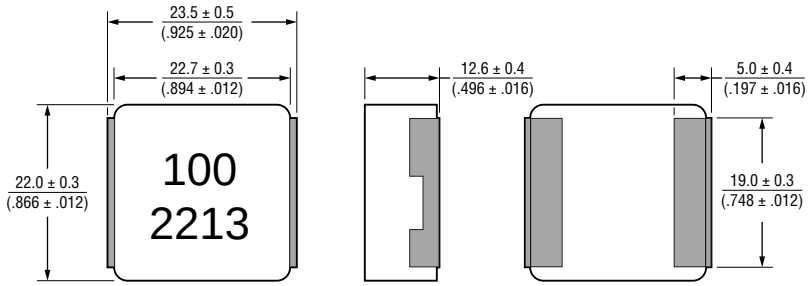
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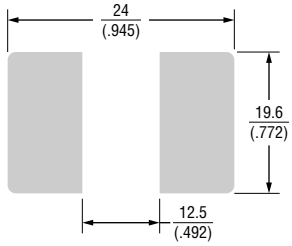
BOURNS®

Product Dimensions



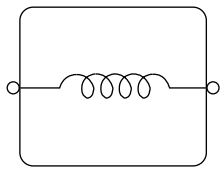
DIMENSIONS: MM / (INCHES)

Recommended Layout



DIMENSIONS: MM / (INCHES)

Electrical Schematic



How to Order

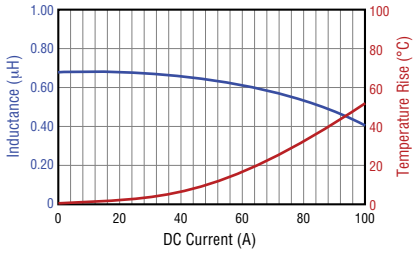
SRP2313CC - R68M

Model

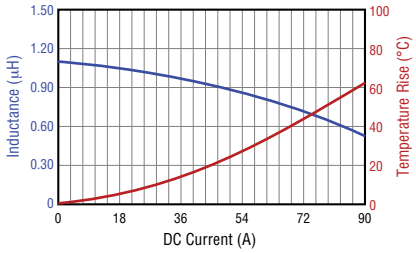
Value Code (see table)

L vs. IDC and Temperature vs. IDC Curves

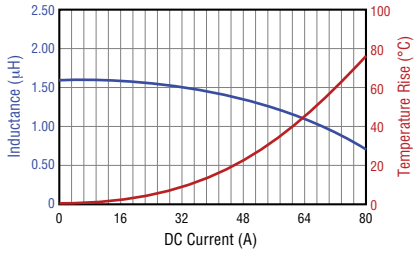
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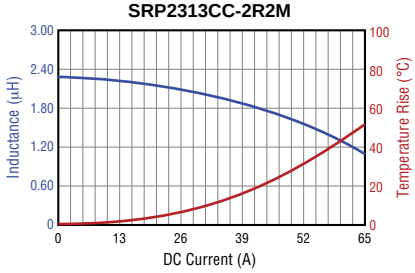
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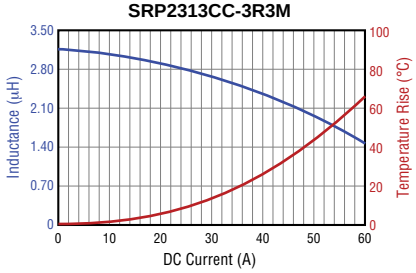
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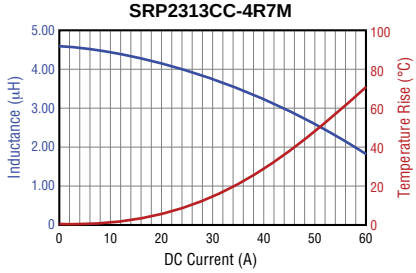
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SRP2313CC-3R3M



SRP2313CC-4R7M

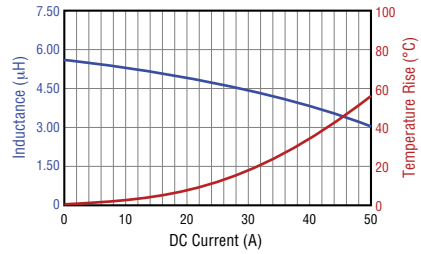


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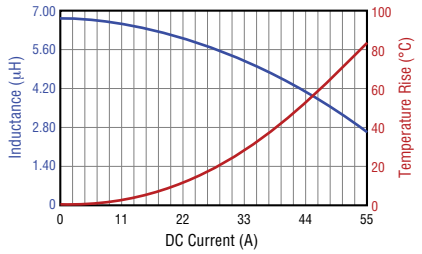
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L vs. IDC and Temperature vs. IDC Curves (continued)

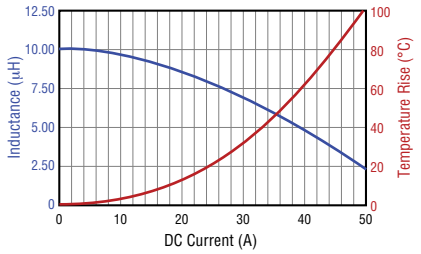
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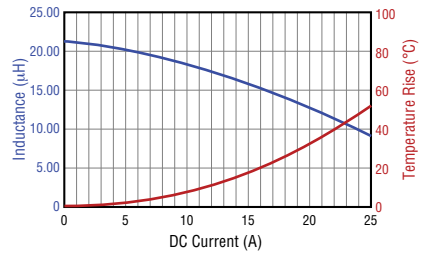
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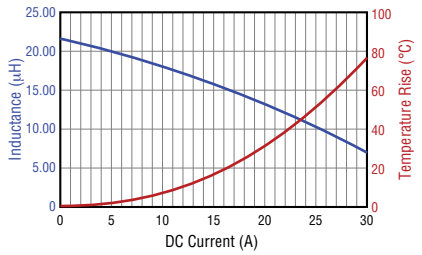
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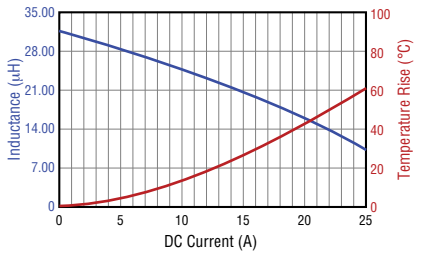
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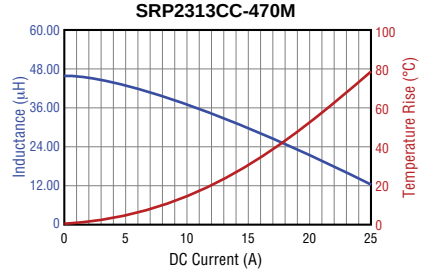
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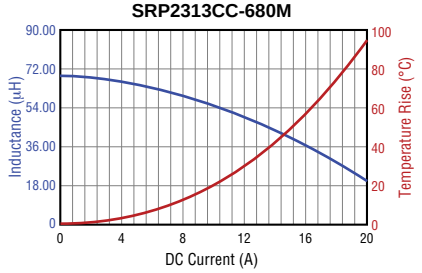
SRP2313CC-330M



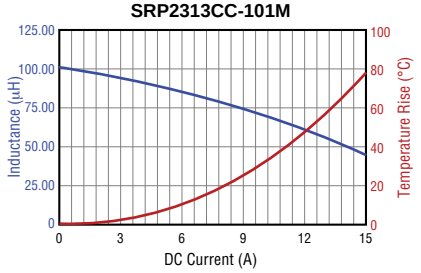
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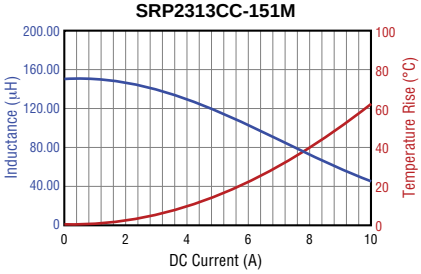
SRP2313CC-680M



SRP2313CC-101M



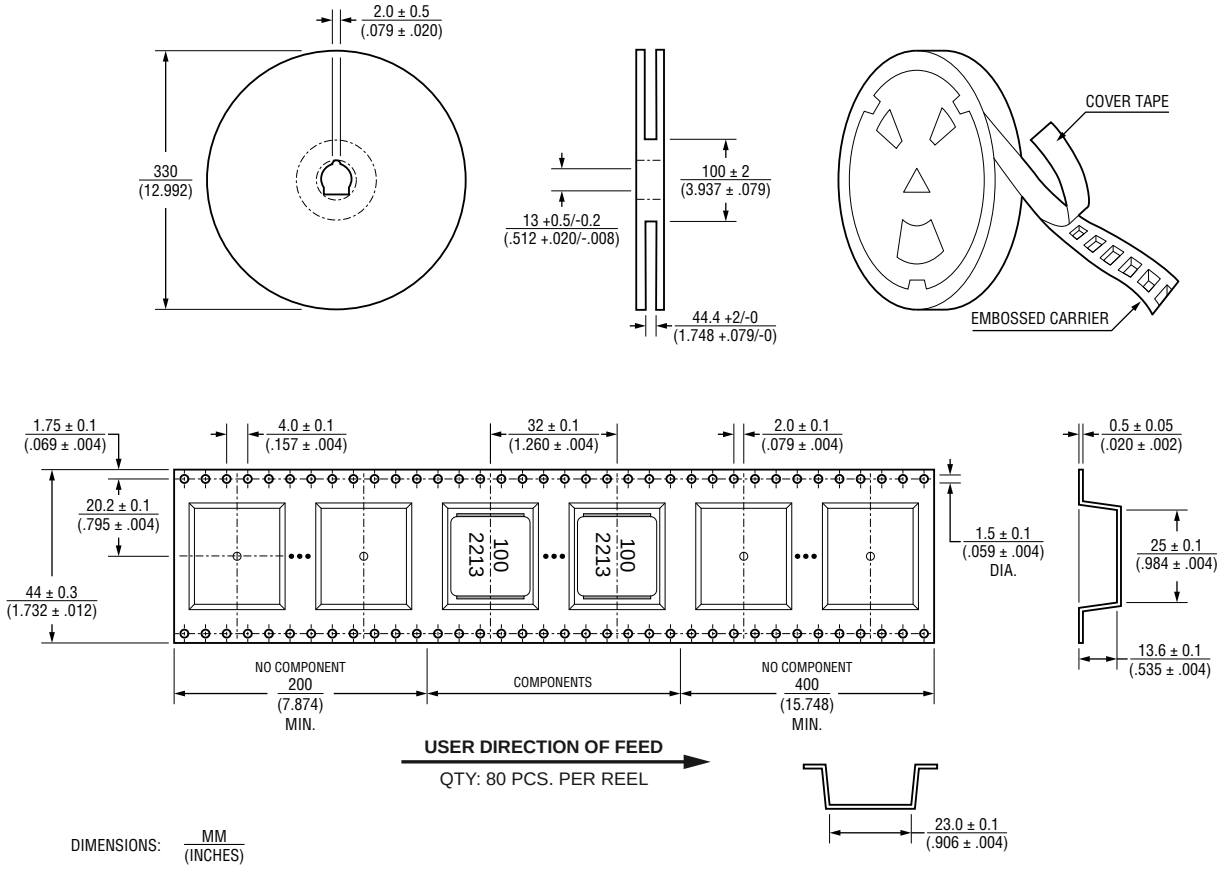
SRP2313CC-151M



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Packaging Specifications



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