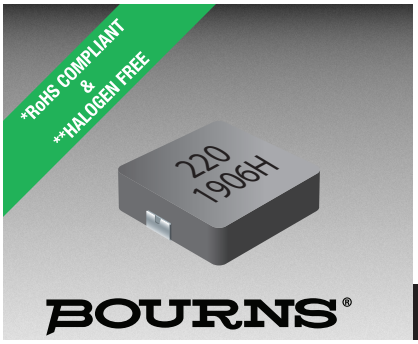
THE DATASHEET OF

SRP1038C-150M



Features

- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Inductance range: 0.10 to 47 µH
- RoHS compliant* and halogen free**

This series is currently available but not recommended for new designs.

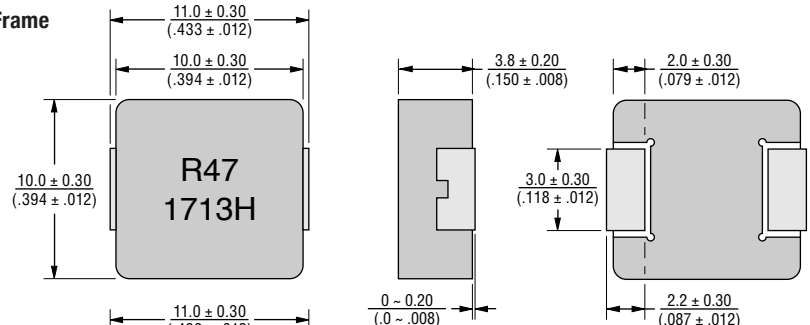
SRP1038C Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

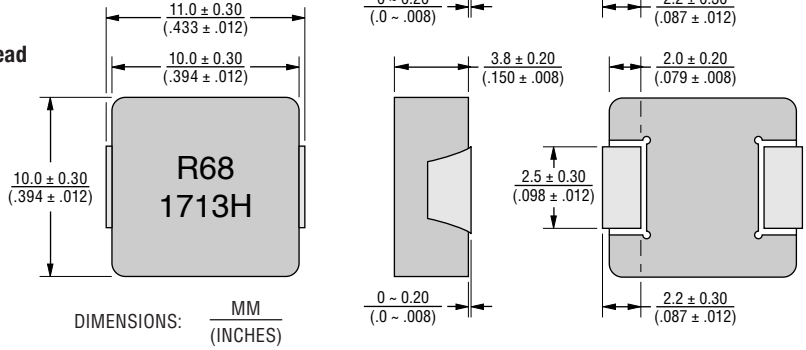
Bourns Part Number	Inductance @ 100 kHz / 1 V		Q (Min.) @100 kHz / 1 V	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	Irms (A) Typ.	Isat (A) Typ.	Terminal Type
	L (µH)	Tol. (%)							
SRP1038C-R10Y	0.10	30	10	215	0.32	0.38	53.0	85.0	Non-Lead Frame
SRP1038C-R15M	0.15	20	10	150	0.50	0.60	45.0	80.0	
SRP1038C-R20M	0.20	20	10	142	0.80	1.00	40.0	75.0	
SRP1038C-R22M	0.22	20	15	142	0.80	1.00	40.0	75.0	
SRP1038C-R30M	0.30	20	15	99	1.00	1.20	38.0	70.0	
SRP1038C-R33M	0.33	20	15	88	1.00	1.20	38.0	70.0	
SRP1038C-R36M	0.36	20	15	88	1.05	1.20	36.0	60.0	
SRP1038C-R47M	0.47	20	15	72	1.30	1.50	31.0	48.0	
SRP1038C-R68M	0.68	20	15	63	2.30	2.70	24.0	45.0	
SRP1038C-1R0M	1.00	20	15	45	3.50	4.00	20.0	39.0	Lead Frame
SRP1038C-1R5M	1.50	20	15	35	4.70	5.30	18.0	35.0	
SRP1038C-2R2M	2.20	20	15	27	6.50	7.20	15.0	27.0	
SRP1038C-3R3M	3.30	20	15	20	10.80	11.80	14.0	22.0	
SRP1038C-4R7M	4.70	20	15	15	14.50	15.50	13.0	20.0	
SRP1038C-5R6M	5.60	20	15	13	18.00	19.30	12.0	16.0	
SRP1038C-6R8M	6.80	20	15	12	19.00	23.30	10.0	15.0	
SRP1038C-8R2M	8.20	20	15	11	20.00	22.50	9.0	13.5	
SRP1038C-100M	10.0	20	15	10	29.00	32.00	8.5	12.5	
SRP1038C-150M	15.0	20	20	9	40.00	45.00	6.3	10.0	
SRP1038C-220M	22.0	20	20	8	62.00	74.00	5.2	7.5	
SRP1038C-270M	27.0	20	20	6.5	80.00	96.00	4.5	6.5	
SRP1038C-330M	33.0	20	20	6.5	94.00	112.00	4.0	6.0	
SRP1038C-470M	47.0	20	20	6	145.00	167.00	3.2	5.0	

Product Dimensions

Lead Frame



Non-Lead Frame



DIMENSIONS: MM / (INCHES)

General Specifications

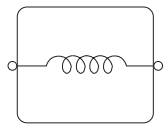
Operating Temperature
.....-40 °C to +125 °C
(Temperature rise included)
Storage Temperature (Component)
.....-40 °C to +125 °C
Rated Current
..... Inductance drops 30 % at Isat
Temperature Rise .....40 °C at rated Irms
Moisture Sensitivity Level.....1
ESD Classification (HBM).....N/A

[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.

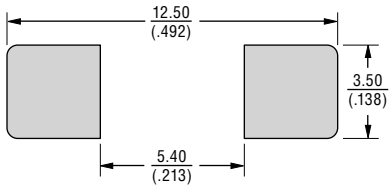
Materials

Core.....Metal alloy powder
Wire .....Enameled copper
Terminal Finish ..... Sn/Ni
Packaging..... 500 pcs. per 13-inch reel

Electrical Schematic



Recommended Layout



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

* 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.

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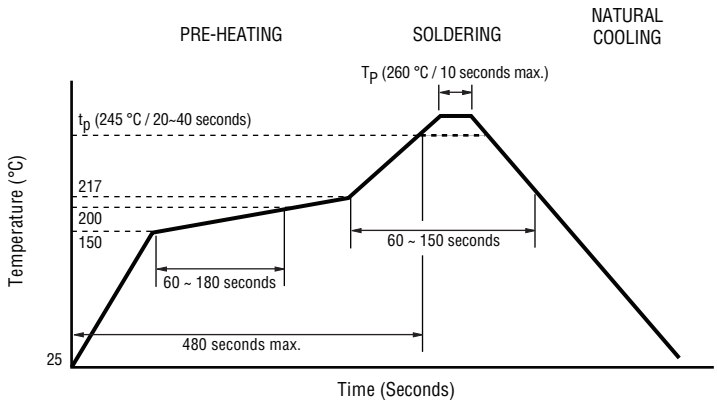
Soldering Profile



REFLOW TIMES: 3 MAX.

How to Order

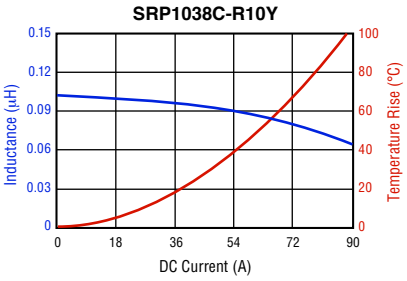
SRP1038C - 100M

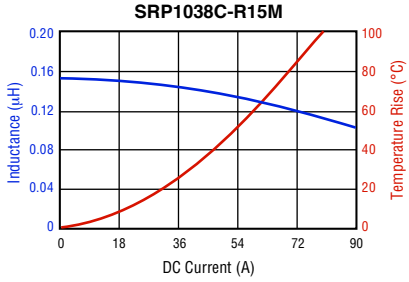
Model

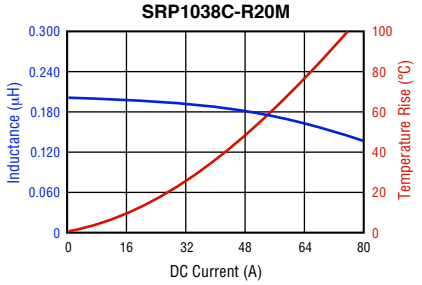
Value Code (see table)

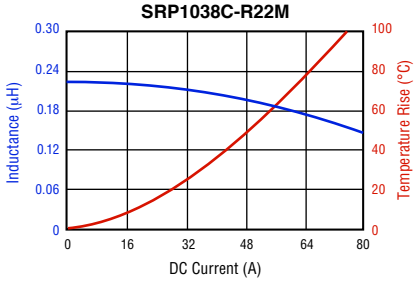
Please consult *Bourns® Model SRP-A Series Visual Inspection Guide* for detailed construction, processing and testing information.

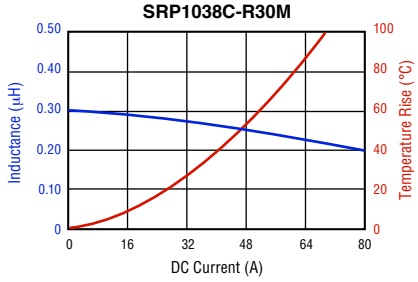
L vs. I Charts

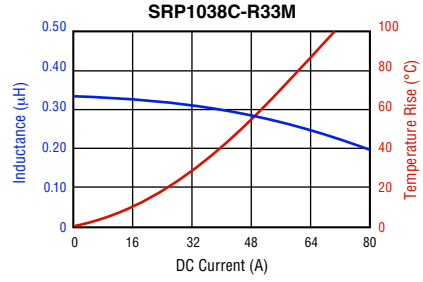


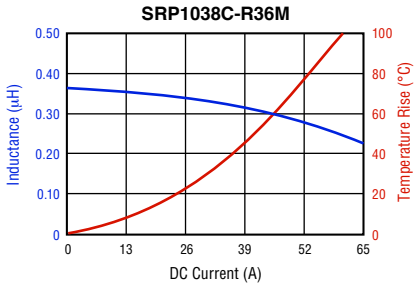


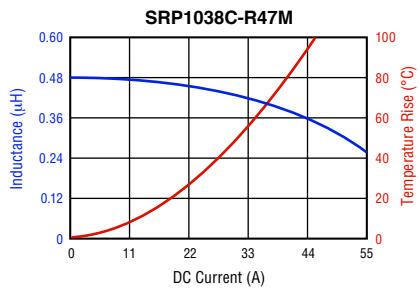


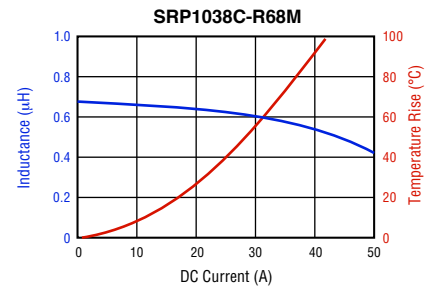












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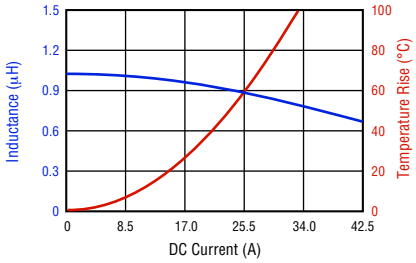
L vs. I Charts (Continued)

SRP1038C-1R0M



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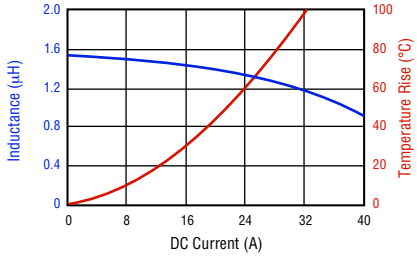

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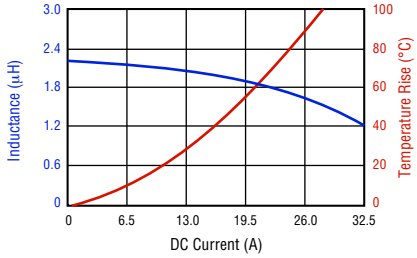

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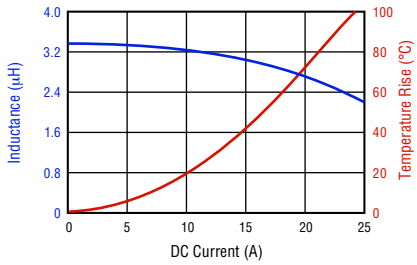

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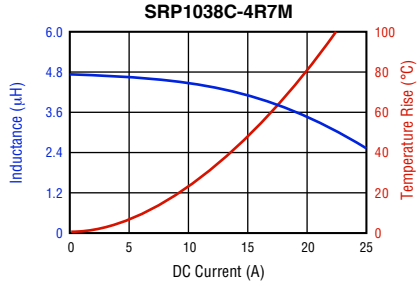

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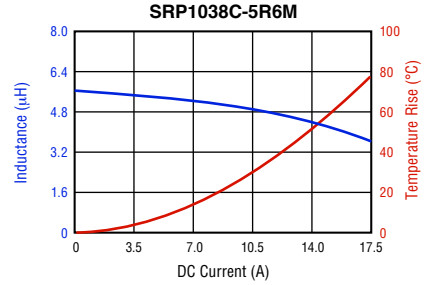

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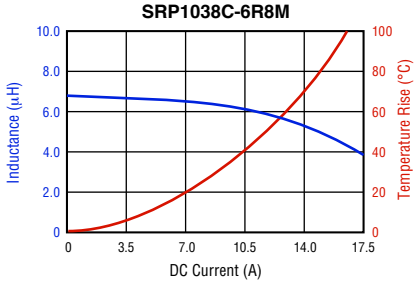

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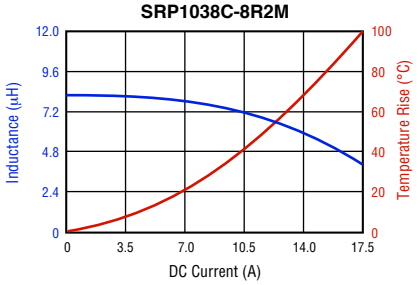

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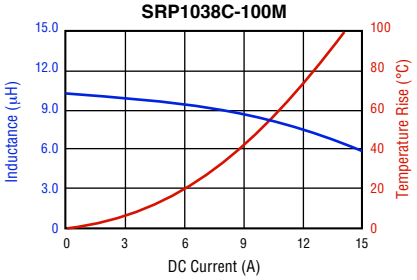

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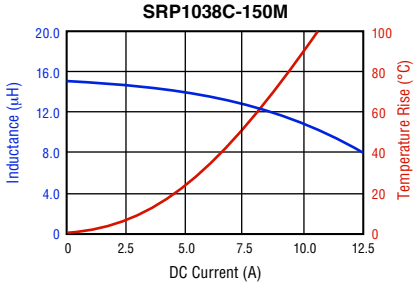

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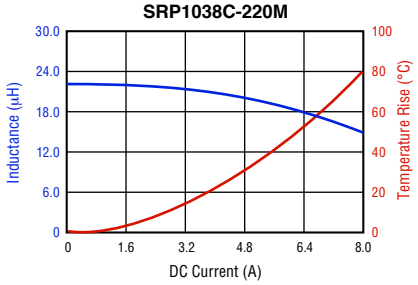

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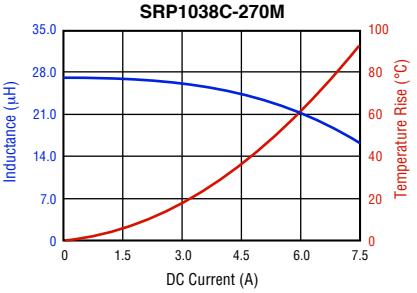

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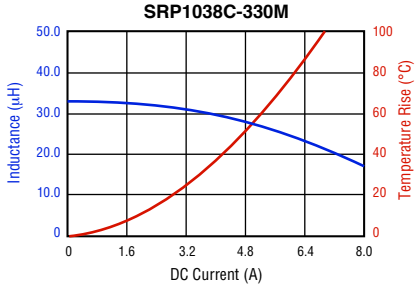

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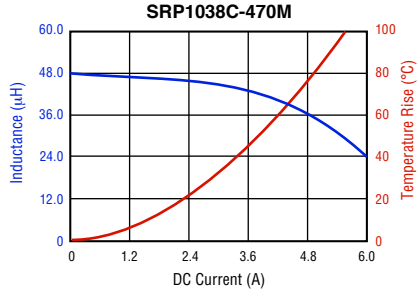

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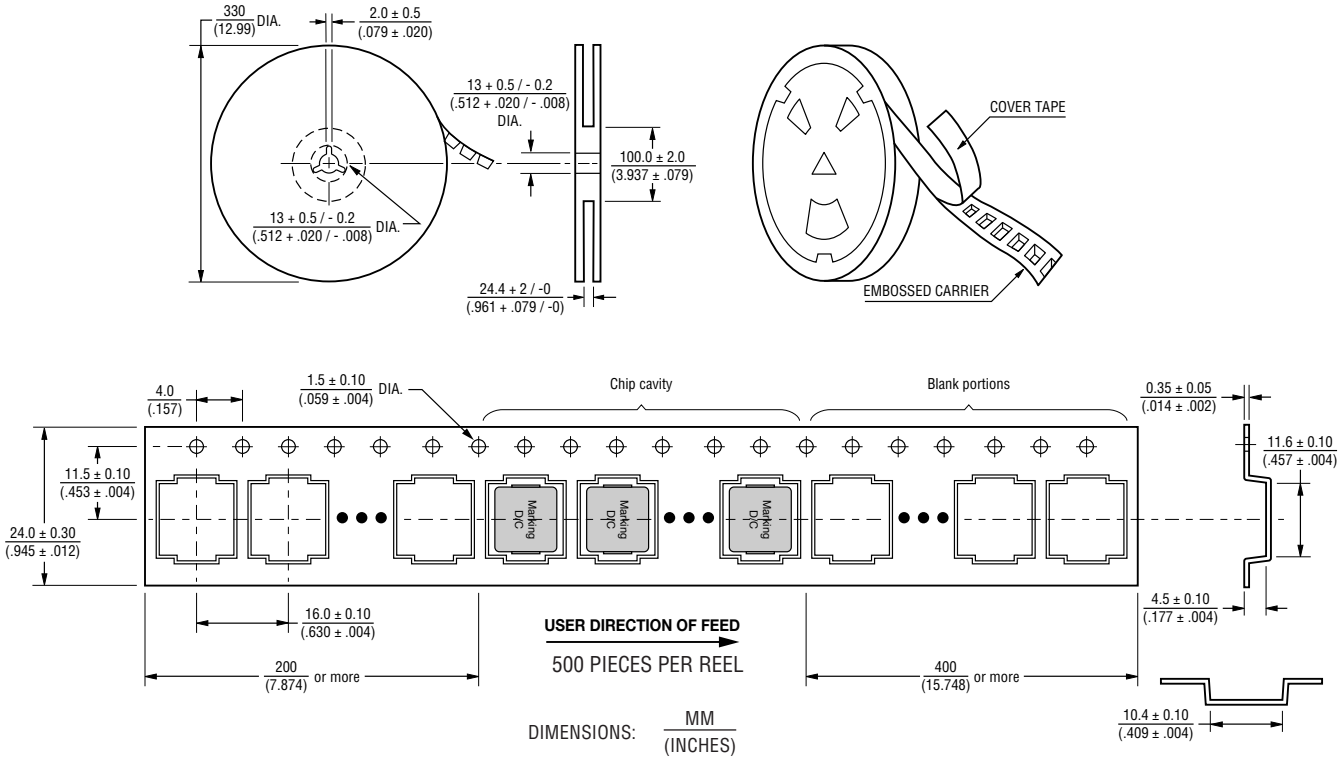
Packaging Specifications



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- Cost Control Management
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- Excess Inventory Management