



**THE DATASHEET OF
SRP1038AA-4R7M**





Features

- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

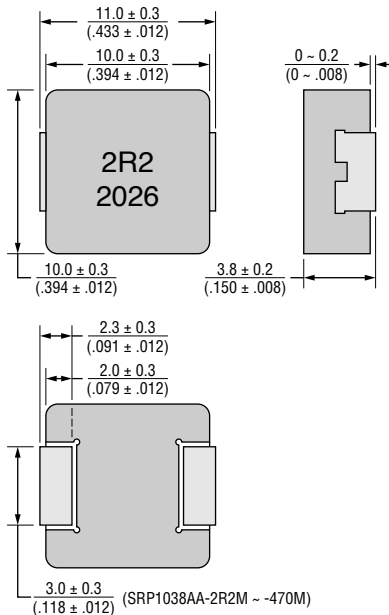
SRP1038AA Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

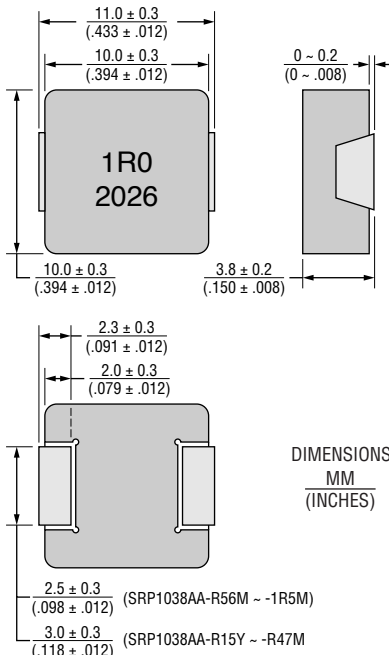
Bourns Part Number	Inductance @ 100 KHz / 1 V		Q (Typ.) @ 100 KHz / 1 V	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	I _{rms} (A) Typ.	I _{sat} (A) Typ.	Terminal Type
	L (μH)	Tol. (%)							
SRP1038AA-R15Y	0.15	30	10	190	0.5	0.6	44	82	Non-Lead Frame
SRP1038AA-R22M	0.22	20	10	150	0.72	0.83	36	70	
SRP1038AA-R36M	0.36	20	10	105	1.05	1.18	33	51	
SRP1038AA-R47M	0.47	20	10	78	1.3	1.5	32	46	
SRP1038AA-R56M	0.56	20	10	68	1.6	1.8	25	34	
SRP1038AA-R68M	0.68	20	10	60	1.9	2.2	23	31	
SRP1038AA-1R0M	1.00	20	15	50	2.9	3.25	20	29	
SRP1038AA-1R5M	1.50	20	15	36	3.7	4.2	17.5	26	
SRP1038AA-2R2M	2.20	20	15	26	5.8	6.7	15	20	
SRP1038AA-3R3M	3.30	20	15	20	10.5	11.8	11	17.5	
SRP1038AA-4R7M	4.70	20	15	16	15.8	19	8.8	15.2	
SRP1038AA-5R6M	5.60	20	15	14	19	22.8	8.0	14.1	
SRP1038AA-6R8M	6.80	20	15	13	22	24.5	7.8	12.2	
SRP1038AA-100M	10.0	20	20	11	27	30	7.5	8.6	
SRP1038AA-150M	15.0	20	20	9	41	45	6.25	7.0	
SRP1038AA-220M	22.0	20	20	8	58	66	5.0	6.2	
SRP1038AA-330M	33.0	20	20	6.5	84	91	4.4	5.5	
SRP1038AA-470M	47.0	20	20	5	125	143	3.5	4.0	

Product Dimensions

Lead Frame Terminal



Non-Lead Frame Terminal



Additional Information

Click these links for more information:



General Specifications

Operating Temp.-55 °C to +155 °C
(Temperature rise included)
Storage Temperature (Component)
.....-55 °C to +155 °C
Rated Current
..... Inductance drops 30 % at I_{sat}
Temperature Rise ... 40 °C at rated I_{rms}¹
Moisture Sensitivity Level..... 1
ESD Classification (HBM)..... N/A

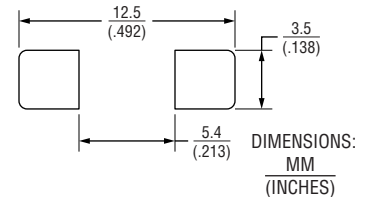
¹ Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

Materials

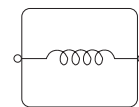
Core.....Metal alloy powder
Wire.....Enameled copper
Terminal FinishSn
Packaging..... 500 pcs. per 13-inch reel

Please consult [Bourns® Model SRP-A Series Visual Inspection Guide](#) for detailed construction, processing and testing information.

Recommended Layout



Electrical Schematic



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

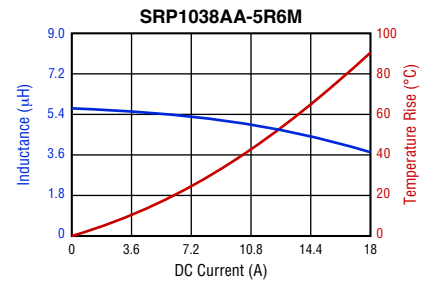
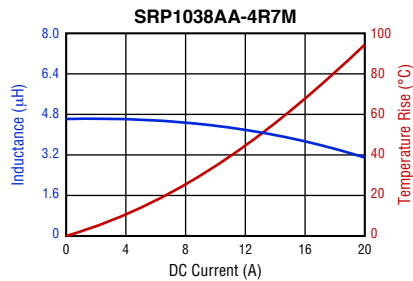
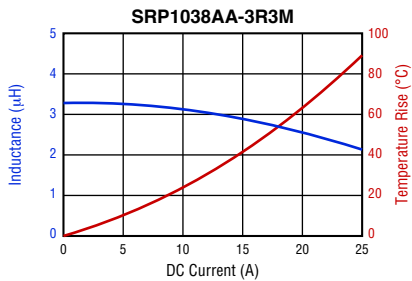
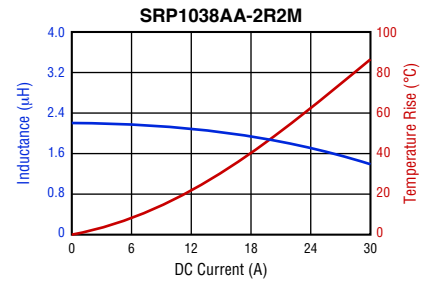
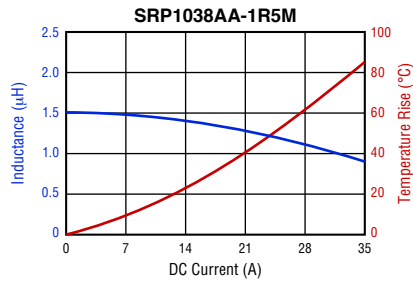
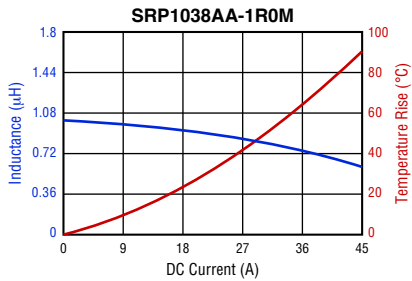
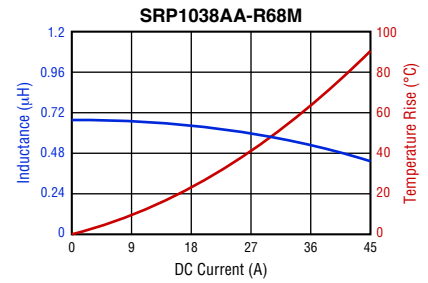
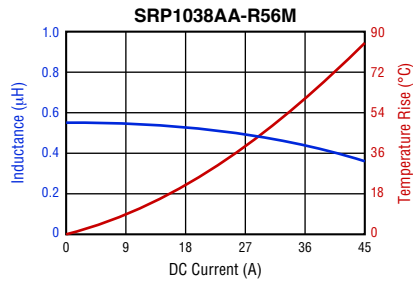
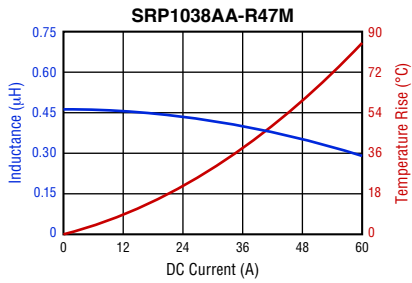
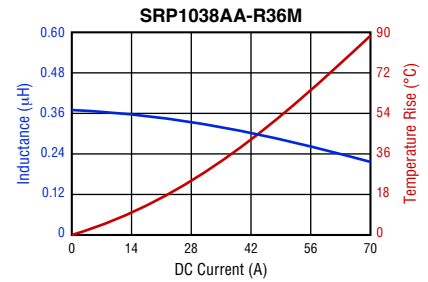
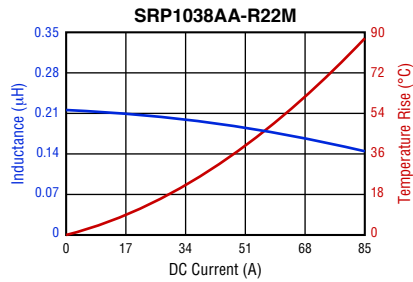
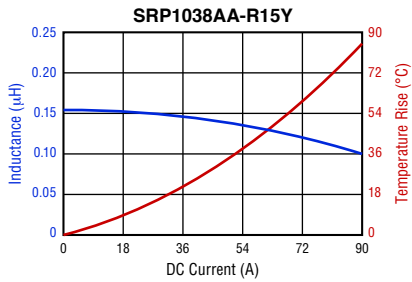
* RoHS Directive 2015/863, Mar 31, 2015 and Annex.
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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SRP1038AA Series - Shielded Power Inductors



L vs. I Charts



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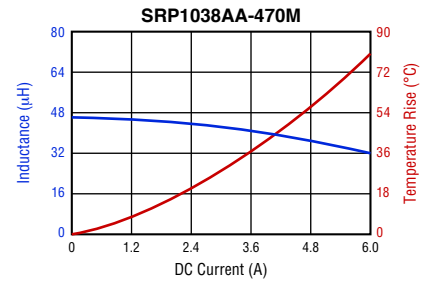
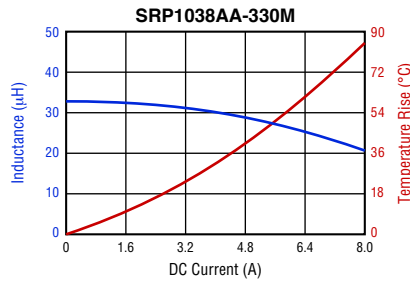
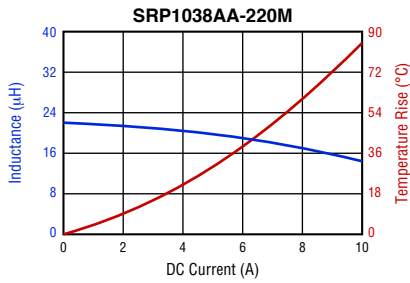
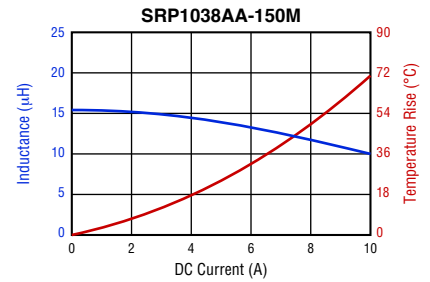
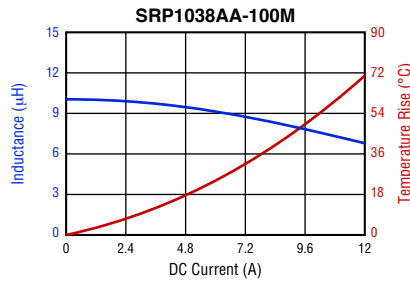
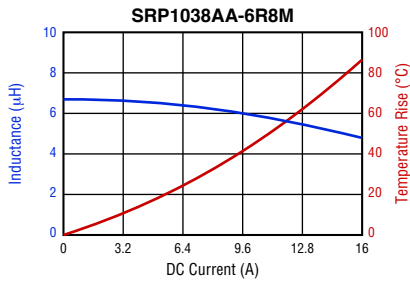
Users should verify actual device performance in their specific applications.

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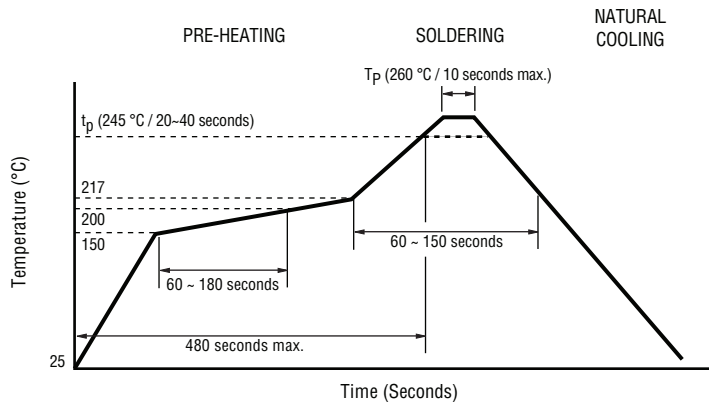
SRP1038AA Series - Shielded Power Inductors



L vs. I Charts (continued)



Soldering Profile



REFLOW TIMES: 3 MAX.

How to Order

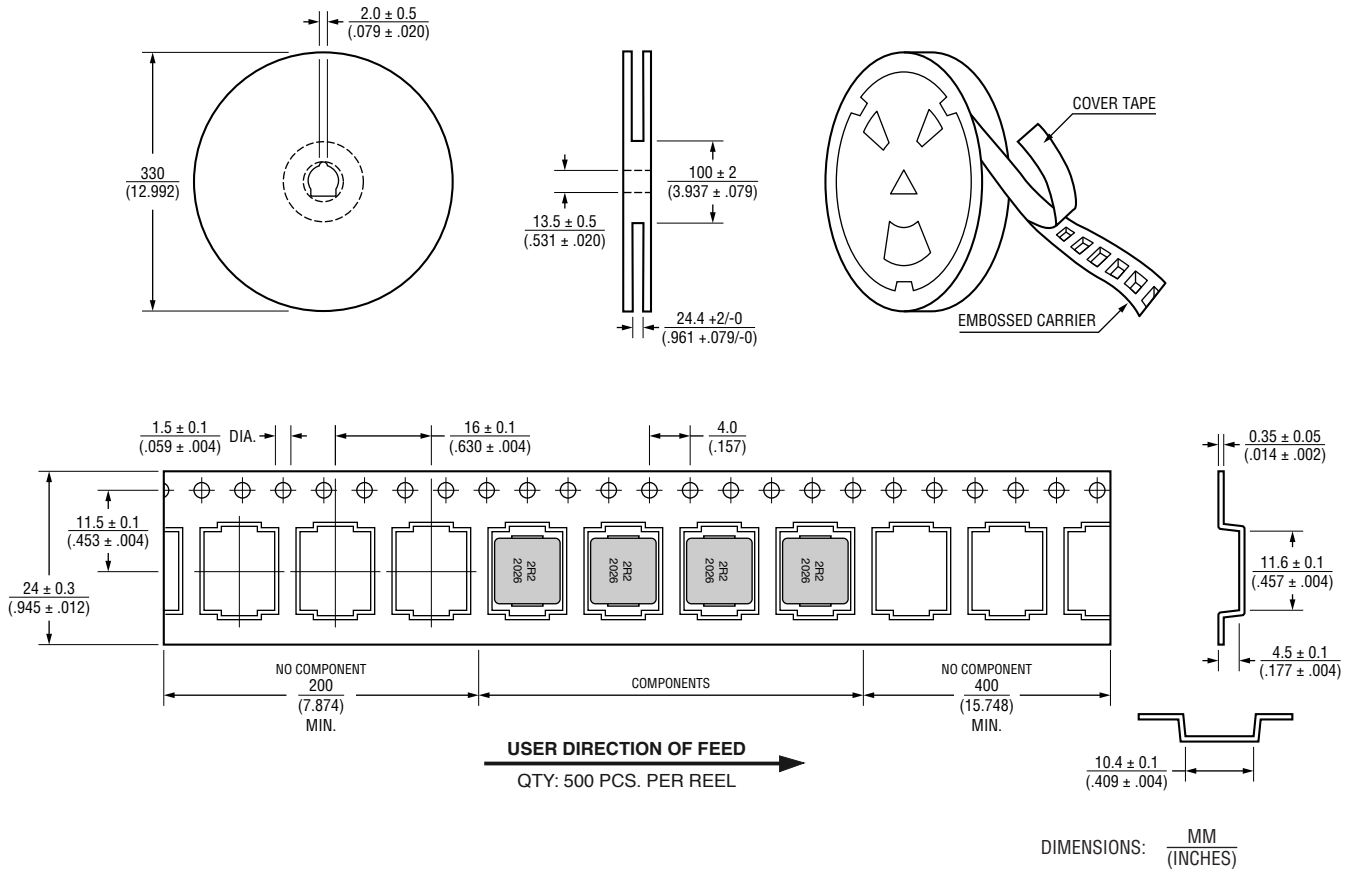
SRP1038AA - 1R0M

Model _____
Value Code (see table) _____

SRP1038AA Series - Shielded Power Inductors

BOURNS®

Packaging Specifications



BOURNS®

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