



Features

- Shielded construction
- Carbonyl powder core
- High saturation current
- Inductance range: 0.10 to 10 μ H
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

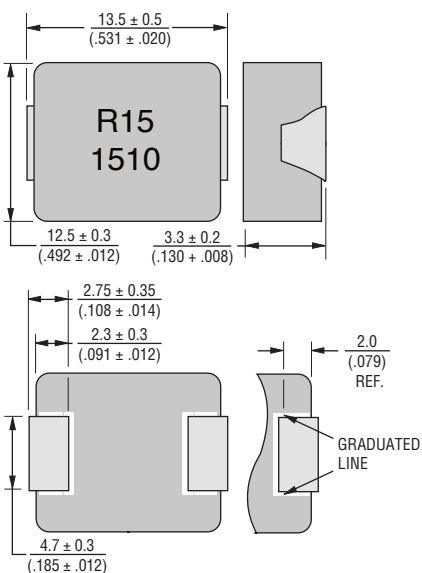
SRP1238A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

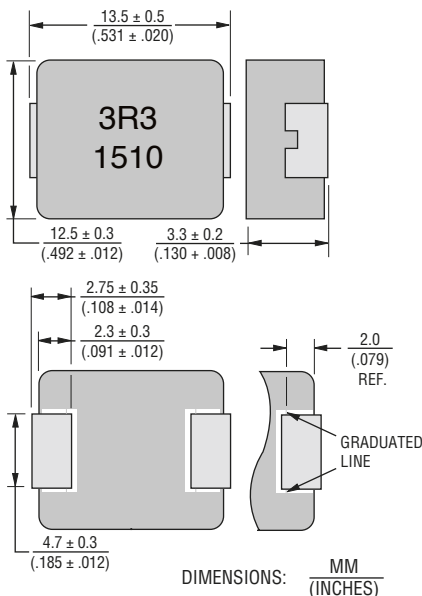
Bourns Part Number	Inductance @ 100 KHz / 1 V		Q (Min.) @100 KHz / 1 V	SRF (MHz) Typ.	DCR (m Ω) Typ.	DCR (m Ω) Max.	I _{rms} (A)	Isat (A)	Terminal Type
	L (μ H)	Tol. (%)							
SRP1238A-R10Y	0.10	± 30	10	175	0.36	0.43	43	84	Non-Lead Frame
SRP1238A-R15Y	0.15	± 30	10	140	0.4	0.48	41	75	
SRP1238A-R22M	0.22	± 20	10	125	0.7	0.81	38.5	65	
SRP1238A-R33M	0.33	± 20	10	85	0.85	1.0	36.5	62	
SRP1238A-R47M	0.47	± 20	10	80	1.2	1.8	32	55	
SRP1238A-R60M	0.60	± 20	15	53	1.5	2.2	29	51	
SRP1238A-R68M	0.68	± 20	15	50	1.9	2.5	28	49	
SRP1238A-R82M	0.82	± 20	15	45	2.2	3.0	25	44	
SRP1238A-1R0M	1.0	± 20	15	40	2.7	3.5	24	40	
SRP1238A-1R2M	1.2	± 20	20	35	4	4.0	21	37	
SRP1238A-1R5M	1.5	± 20	20	30	4.8	5.5	19	35	
SRP1238A-1R8M	1.8	± 20	20	27	5.2	7.0	17	30	
SRP1238A-2R2M	2.2	± 20	20	25	6.3	8.0	16	29	
SRP1238A-3R3M	3.3	± 20	20	20	11	13.5	12	27	
SRP1238A-4R7M	4.7	± 20	20	15	15.3	18.5	10	24	
SRP1238A-5R6M	5.6	± 20	20	15	18	22.0	9.5	19	
SRP1238A-6R8M	6.8	± 20	20	13	20	24.0	9	18	
SRP1238A-8R2M	8.2	± 20	20	12	23	28.0	8.5	16	
SRP1238A-100M	10	± 20	20	11	29	34.0	7	14	

Product Dimensions

Non-Lead Frame Terminal



Lead Frame Terminal



General Specifications

Test Voltage	1.0 V
Test Frequency	100 KHz
Operating Temperature	-40 °C to +150 °C (Temperature rise included)
Storage Temperature	-40 °C to +125 °C
Rated Current	Inductance drops 20 % at Isat
Temperature Rise	40 °C at rated I _{rms}
Resistance to Soldering Heat	+260 °C, 40 sec. max.
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	Carbonyl powder
Wire	Enameled copper
Terminal Finish	Sn
Packaging	500 pcs. per 13-inch reel

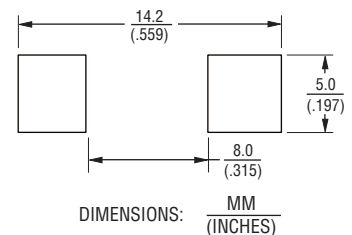
How to Order

SRP1238A - 100M

Model _____

Value Code (see table) _____

Recommended Layout



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



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.

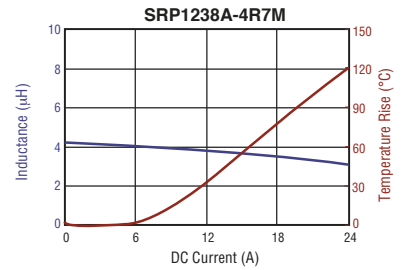
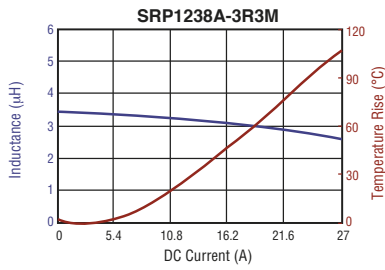
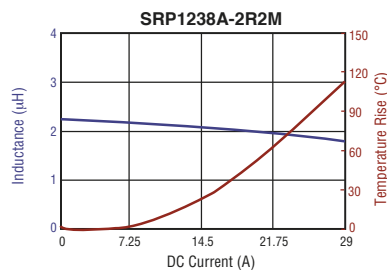
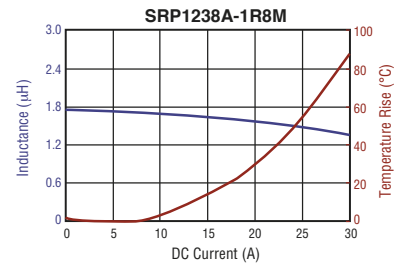
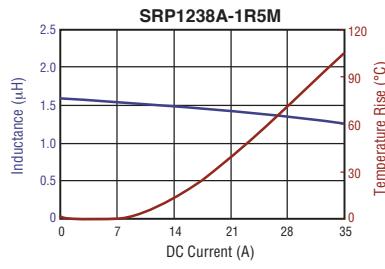
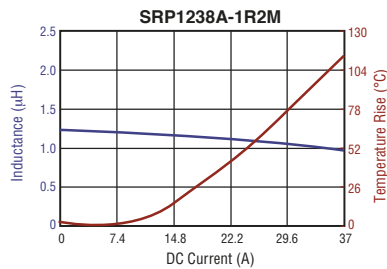
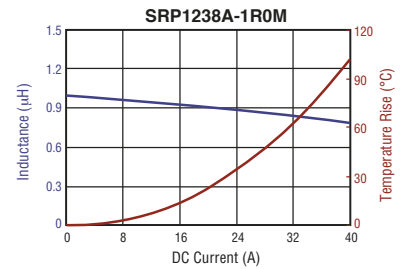
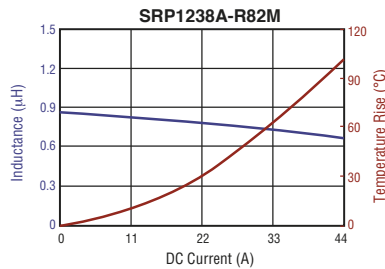
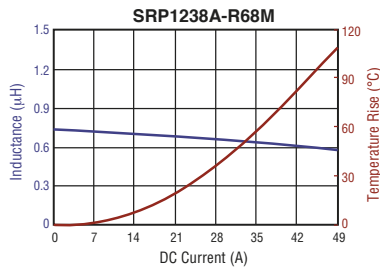
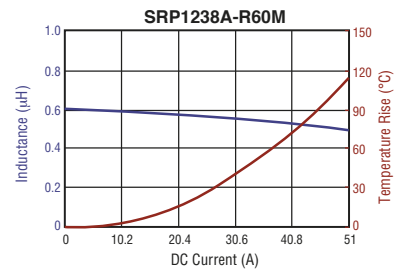
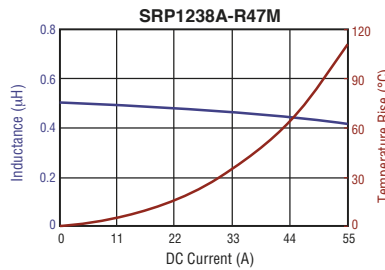
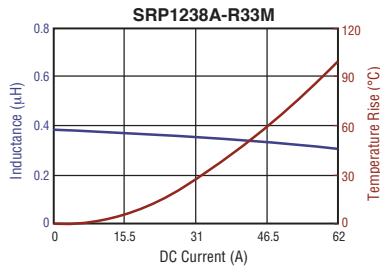
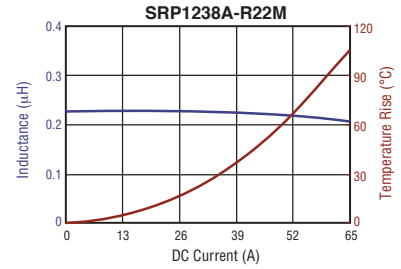
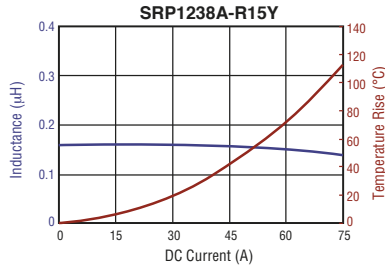
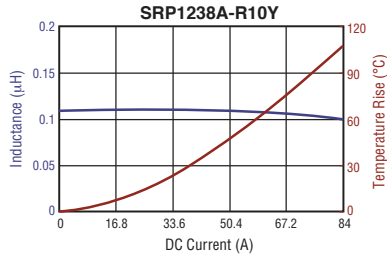
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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SRP1238A Series - Shielded Power Inductors

BOURNS®

L vs. I Charts



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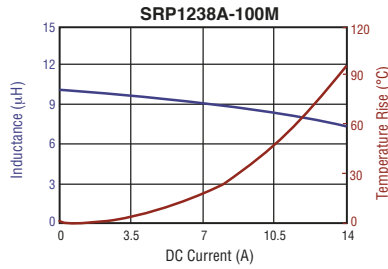
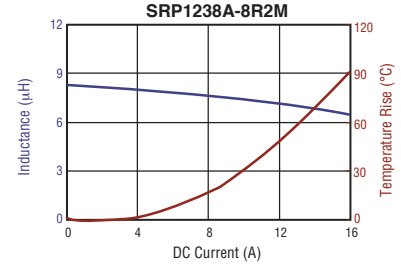
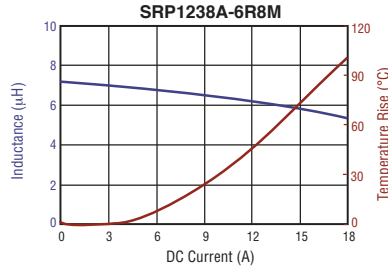
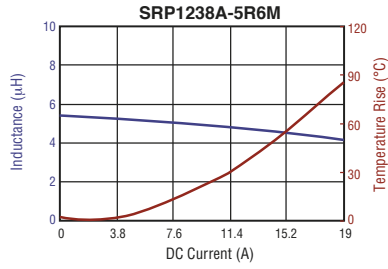
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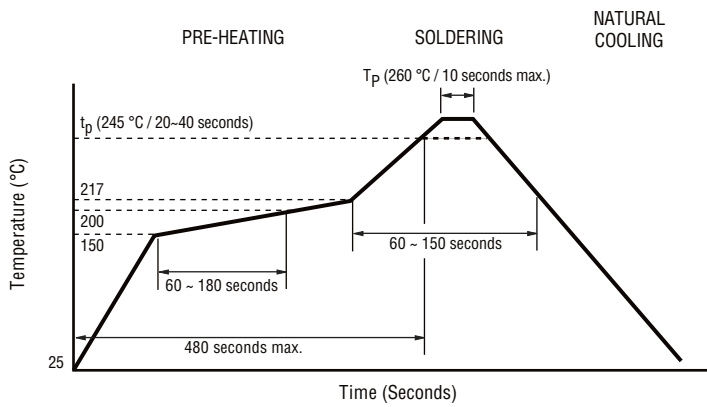
SRP1238A Series - Shielded Power Inductors



L vs. I Charts (Continued)

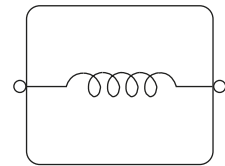


Soldering Profile



REFLOW TIMES: 3 MAX.

Electrical Schematic



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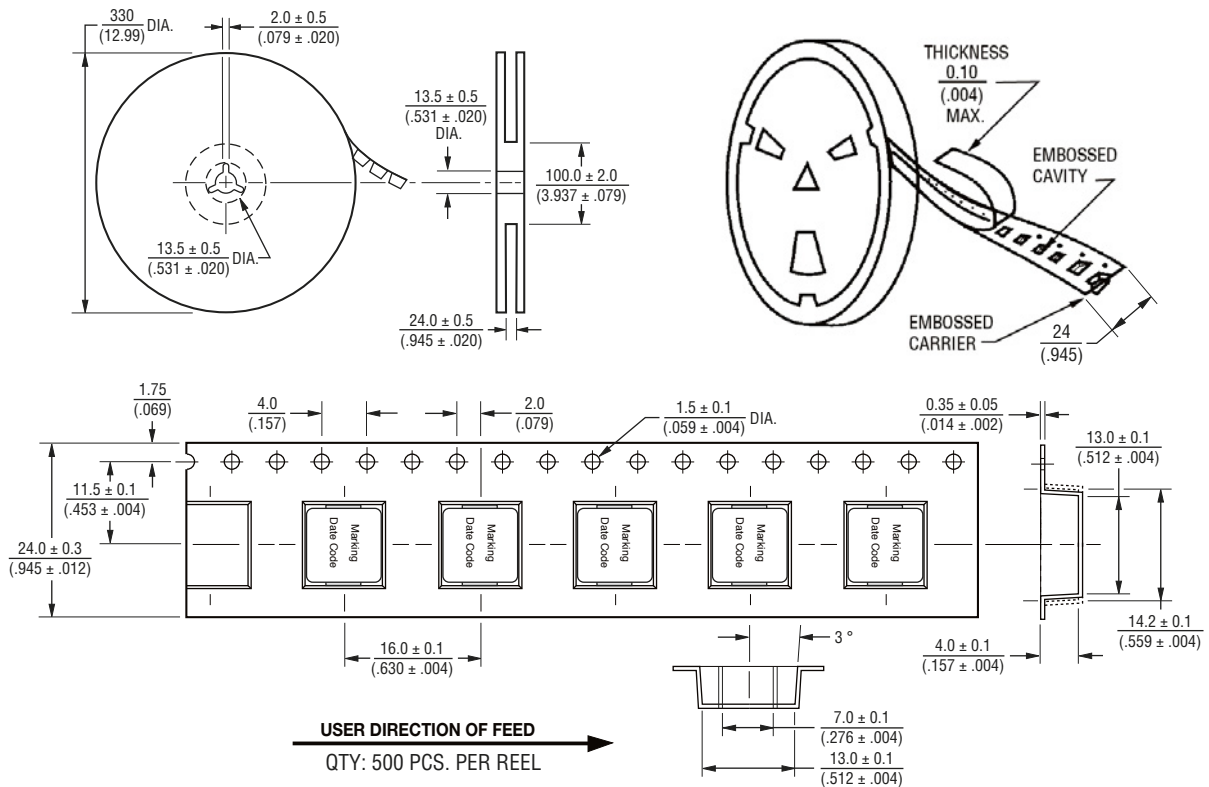
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Packaging Specifications



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

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