

Features

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

Additional Information

Click these links for more information:











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PRODUCT TECHNICAL INVENTORY SAMPLES

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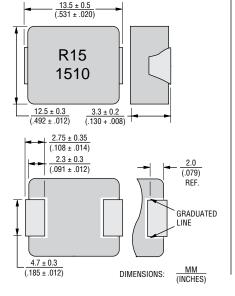
SRP1238A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 KHz /1 V		Q (Min.) @100 KHz /1 V	SRF (MHz)	DCR (mΩ)	DCR (mΩ)	Irms (A)	Isat (A)	Terminal Type
	L (μΗ)	Tol. (%)	/ I V	Тур.	Тур.	Max.	, ,		,,
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	Lead
SRP1238A-2R2M	2.2	± 20	20	25	6.3	8.0	16	29	Frame
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



13.5 ± 0.5 (.531 ± .020) 3R3 1510 12.5 ± 0.3 $\frac{3.3 \pm 0.2}{(.130 + .008)}$ (.492 ± .012) 2.75 ± 0.35 $(.108 \pm .014)$ 2.3 ± 0.3 2.0 (.079) $(.091 \pm .012)$ REF. GRADUATED LINE 4.7 ± 0.3

Lead Frame Terminal

General Specifications

Test Frequency100 KHz
Operating Temperature
55 °C to +150 °C
(Temperature rise included)
Storage Temperature
55 °C to +150 °C
Rated Current
Inductance drops 20 % at Isat

Test Voltage 1.0 V

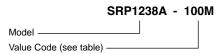
Temperature Rise40 °C at rated Irms Moisture Sensitivity Level.....1 ESD Classification (HBM).....N/A

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.

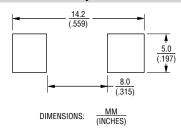
Materials

Core	Carbonyl powder
	Enameled copper
Terminal Finish	Sn
Packaging 500	pcs. per 13-inch reel

How to Order



Recommended Layout



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

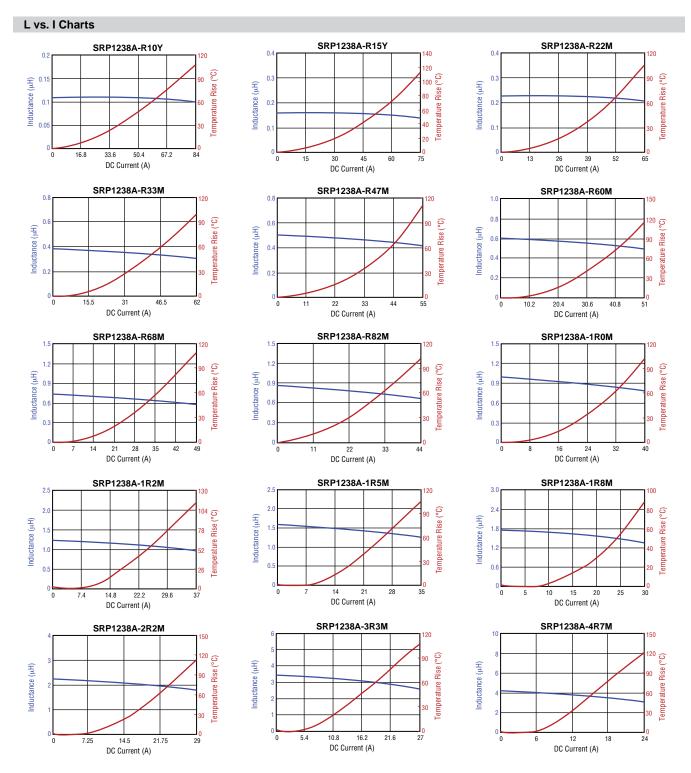
Users should verify actual device performance in their specific applications.

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^{*} 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 (CI) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (CI) content is 1500 ppm or less. Specifications are subject to change without notice.

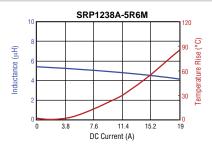
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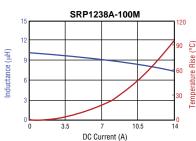
SRP1238A Series - Shielded Power Inductors

L vs. I Charts (Continued)

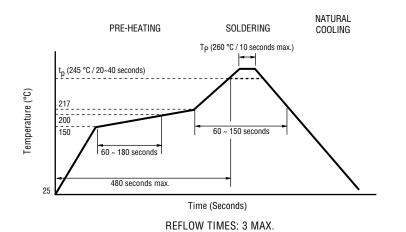




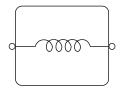




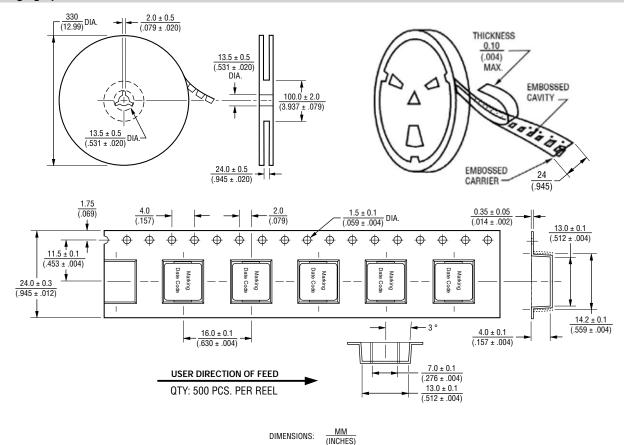
Soldering Profile



Electrical Schematic



Packaging Specifications



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