

Features

- Shielded construction
- Inductance range: 1 to 47 µH
- Heating current up to 5.1 A
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

SRR4818A Series – Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 kHz/0.1 V		SRF (MHz)	DCR (mΩ)		I rms ¹ (A)	I rms ² (A)	I sat (A)
	L (µH)	Tol. (%)	`Typ.´	Тур.	Max.	Typ.	Typ.	Typ.
SRR4818A-1R0Y	1.0	± 30	140	19.2	25.0	4.00	5.10	3.60
SRR4818A-1R5Y	1.5	± 30	105	25.2	35.0	3.75	4.70	3.00
SRR4818A-2R2Y	2.2	± 30	90	33.7	45.0	2.70	3.50	2.43
SRR4818A-3R3Y	3.3	± 30	70	42.8	55.0	2.50	3.10	2.10
SRR4818A-3R9Y	3.9	± 30	65	54.5	70.0	2.20	2.70	1.90
SRR4818A-4R7Y	4.7	± 30	55	59.4	80.0	2.00	2.60	1.50
SRR4818A-5R6Y	5.6	± 30	50	74.3	90.0	1.75	2.30	1.35
SRR4818A-6R8Y	6.8	± 30	45	82.1	100.0	1.65	2.20	1.25
SRR4818A-8R2Y	8.2	± 30	43	97.7	130.0	1.55	1.90	1.15
SRR4818A-100M	10	± 20	40	109.8	140.0	1.45	1.80	1.05
SRR4818A-120M	12	± 20	37	132.2	170.0	1.30	1.60	0.95
SRR4818A-150M	15	± 20	30	176.7	220.0	1.25	1.50	0.87
SRR4818A-180M	18	± 20	28	214.8	280.0	1.10	1.40	0.79
SRR4818A-220M	22	± 20	25	280.3	360.0	1.00	1.25	0.72
SRR4818A-270M	27	± 20	22	317.6	400.0	0.90	1.15	0.63
SRR4818A-330M	33	± 20	20	399.1	500.0	0.70	0.90	0.56
SRR4818A-390M	39	± 20	17	439.3	540.0	0.63	0.80	0.53
SRR4818A-470M	47	± 20	16	504.1	630.0	0.60	0.75	0.47

How to Order

Model

SRR4818A - 1R0Y

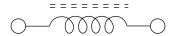
Value Code (see table)

BOURNS[®]

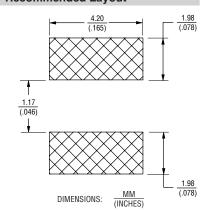
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Electrical Schematic



Recommended Layout





CALIFORNIA WARNING Can expose you to lead, a carcinogen and reproductive toxicant. See 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 (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. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

Additional Information

Click these links for more information:











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INVENTORY SAMPLES

General Specifications

Operating Temp.....-40 °C to +150 °C (Temperature rise included) Storage Temperature ... -40 °C to +150 °C

Temperature Rise20 °C typ. at rated Irms1 40 °C typ. at rated Irms²

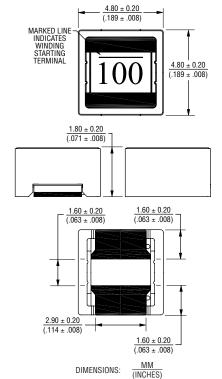
Rated Current

..... Inductance drops 35 % at Isat Moisture Sensitivity Level.....1 ESD Classification (HBM).....N/A

Materials

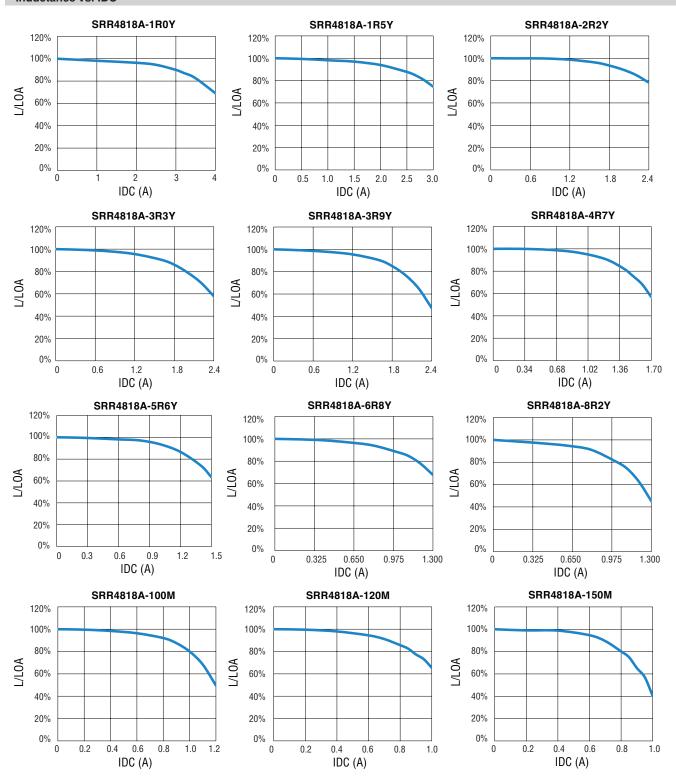
Core......Ferrite WireEnameled copper Terminal Finish SnAgCu Packaging....... 800 pcs. per 7-inch reel

Product Dimensions

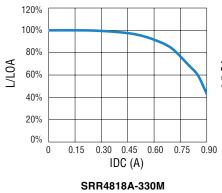


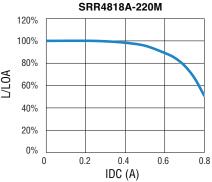
BOURNS

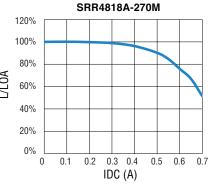
Inductance vs. IDC

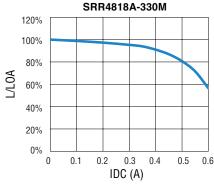


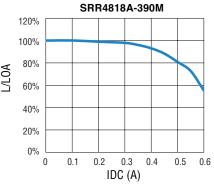
Inductance vs. IDC (Continued) SRR4818A-180M

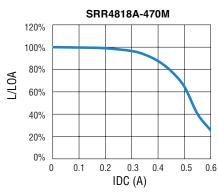




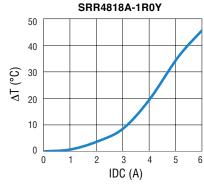


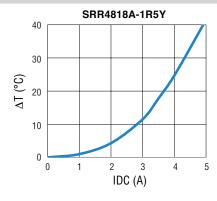


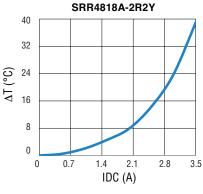


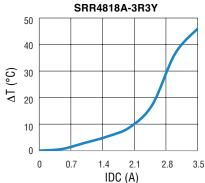


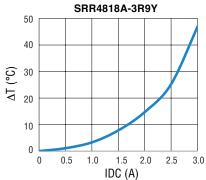
Temperature vs. IDC

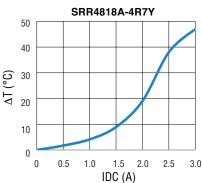










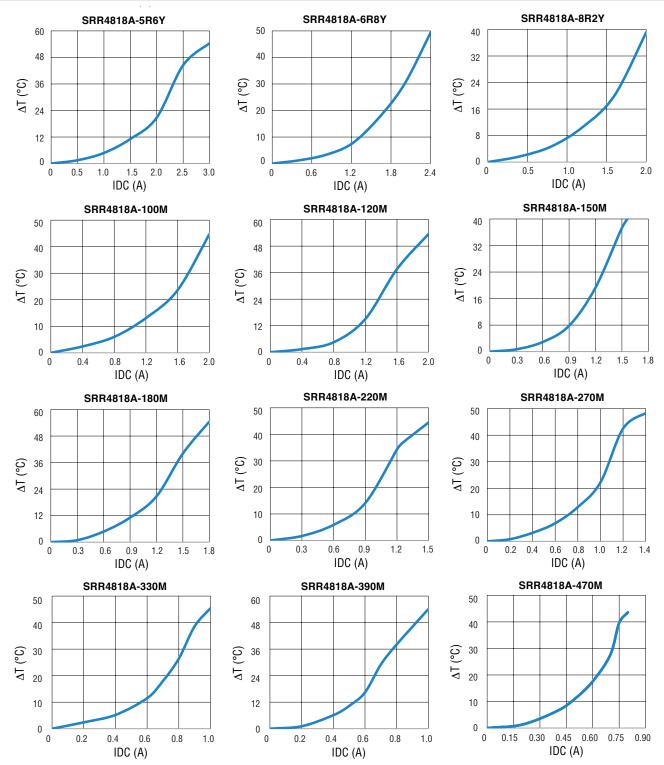


Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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Temperature vs. IDC (Continued)

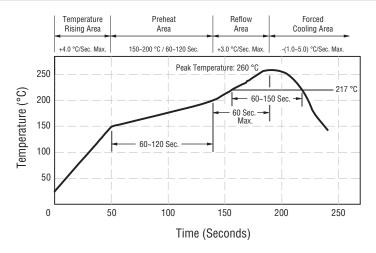


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Soldering Profile

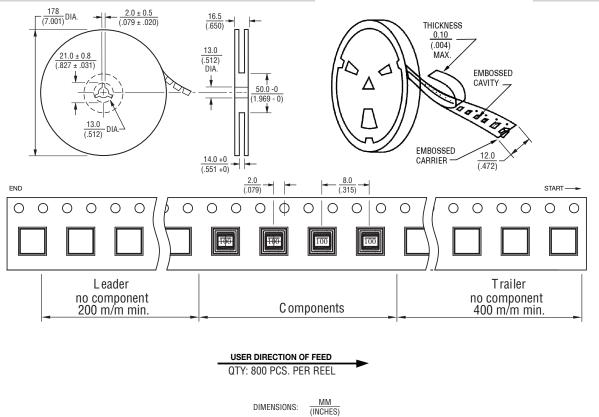


Peak Temperature: 260 °C max.

Max. Peak Temperature -5 °C: 30 sec. max.

Max. Time Above 217 °C: 60~150 sec. max.

Packaging Specifications



REV. 08/25

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