

Features

- Shielded construction
- Inductance range: 1 to 100 µH
- Heating current up to 3.6 A
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

SRR3818A 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)	l sat
	L (μH)	Tol. (%)	Typ.	Тур.	Max.	Typ.	Typ.	(A)
SRR3818A-1R0Y	1.0	± 30	165	27.5	37	2.75	3.6	2.1
SRR3818A-1R5Y	1.5	± 30	125	33	47	2.5	3.1	1.6
SRR3818A-2R2Y	2.2	± 30	95	45.5	60	2	2.6	1.4
SRR3818A-2R7Y	2.7	± 30	90	49.5	65	1.9	2.5	1.3
SRR3818A-3R3Y	3.3	± 30	75	64.5	85	1.7	2.1	1.15
SRR3818A-3R9Y	3.9	± 30	70	80	105	1.6	2	1.05
SRR3818A-4R7Y	4.7	± 30	60	90	120	1.5	1.9	0.95
SRR3818A-6R8Y	6.8	± 30	50	125	160	1.25	1.6	0.8
SRR3818A-100M	10	± 20	40	180	235	1	1.3	0.65
SRR3818A-150M	15	± 20	30	260	340	0.8	1.05	0.55
SRR3818A-220M	22	± 20	25	395	500	0.65	0.8	0.43
SRR3818A-330M	33	± 20	20	590	740	0.5	0.65	0.34
SRR3818A-470M	47	± 20	15	825	1030	0.45	0.56	0.3
SRR3818A-680M	68	± 20	13	1280	1600	0.38	0.46	0.24
SRR3818A-101M	100	± 20	11	2040	2600	0.28	0.34	0.2

How to Order

SRR3818A - 1R0Y

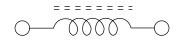
Model -Value Code (see table)

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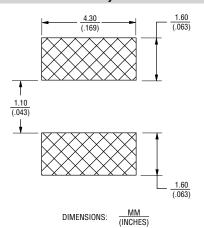
Americas: Tel: +1 951-781-5500 Email: americus@bourns.com Mexico: Tel: +52-614-478-0400 Email: mexicus@bourns.com Asia: Tel: +886-2-2562-4117 Email: asiacus@bourns.com EMEA: Tel: +36 88 885 877 Email: eurocus@bourns.com

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Electrical Schematic



Recommended Layout



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 (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:











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

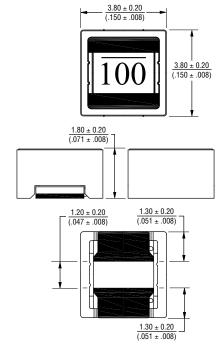
Rated Current

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

Materials

Core...... Ferrite WireEnameled copper Terminal Finish Sn Packaging...... 1000 pcs. per 7-inch reel

Product Dimensions



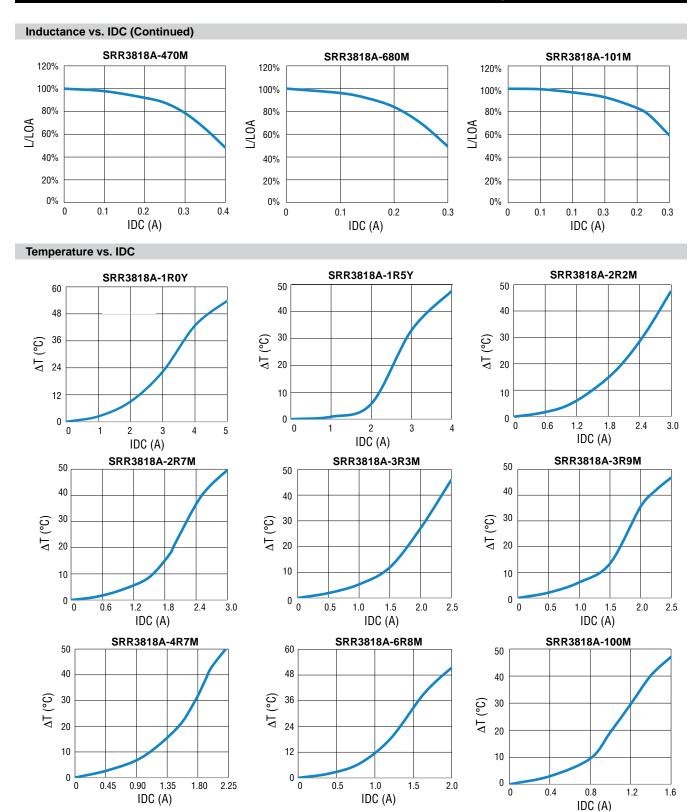
DIMENSIONS:

MM (INCHES)

Inductance vs. IDC SRR3818A-1R0Y SRR3818A-1R5Y SRR3818A-2R2M 120% 120% 120% 100% 100% 100% 80% 80% 80% L/LOA L/L0A 60% 60% 60% 40% 40% 40% 20% 20% 20% 0% 0% 0% 0 2.0 2.5 0.5 1.0 1.5 2.0 0 0.5 1.0 1.5 0 0.5 1.0 1.5 2.0 IDC (A) IDC (A) IDC (A) SRR3818A-2R7M SRR3818A-3R3M SRR3818A-3R9M 120% 120% 120% 100% 100% 100% 80% 80% 80% 60% 60% 60% 40% 40% 40% 20% 20% 20% 0% 0% 0% 0.8 1.2 0 0.6 0.9 1.2 1.5 0 0.6 0.9 1.2 IDC (A) IDC (A) IDC (A) SRR3818A-4R7M SRR3818A-6R8M SRR3818A-100M 120% 120% 120% 100% 100% 100% 80% 80% 80% 60% 60% 60% 40% 40% 40% 20% 20% 20% 0% 0% 0% 0.6 0.8 0.2 0.4 0.6 1.2 1.0 0.4 0.8 IDC (A) IDC (A) IDC (A) SRR3818A-150M SRR3818A-220M SRR3818A-330M 120% 120% 120% 100% 100% 100% 80% 80% 80% L/L0A 60% 60% 60% 40% 40% 40% 20% 20% 20% 0.0 0.1 0.2 0.3 0.4 0.5 0.6 0 0.1 0.2 0.3 0.5 0 0.1 0.2 0.3 0.4 IDC (A) IDC (A) IDC (A)

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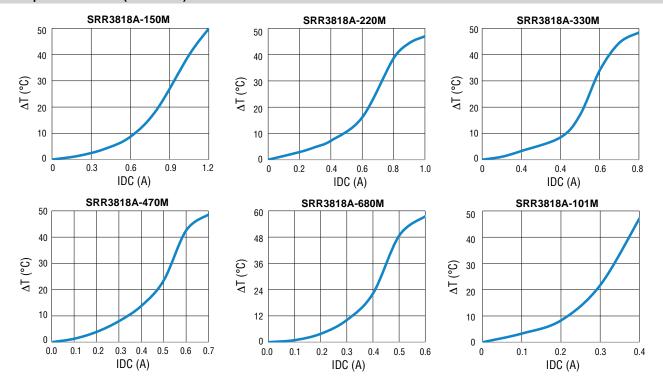
Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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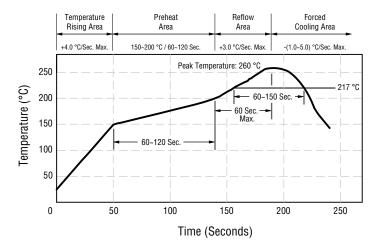
Temperature vs. IDC (Continued)



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Soldering Profile

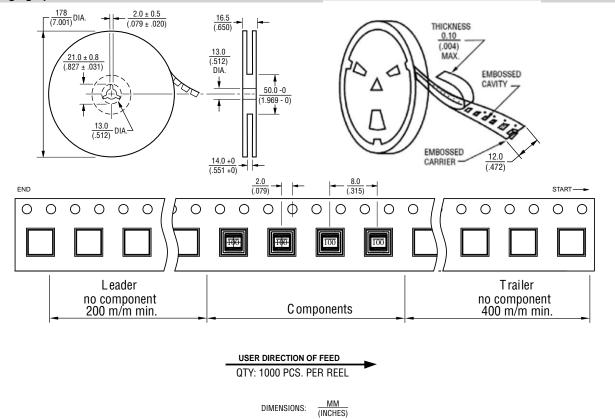


Peak Temperature: 260 °C max.

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

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

Packaging Specifications



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