

RoHS COMPLIANT* + HALOGEN FREE
& AEC COMPLIANT



BOURNS®

Features

- Multiple configurations: parallel, series, dual-inductor and transformer
- Magnetically shielded, low radiation
- Inductance range: 8.2 to 600 μ H
- Heating current up to 2.19 A
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

Applications

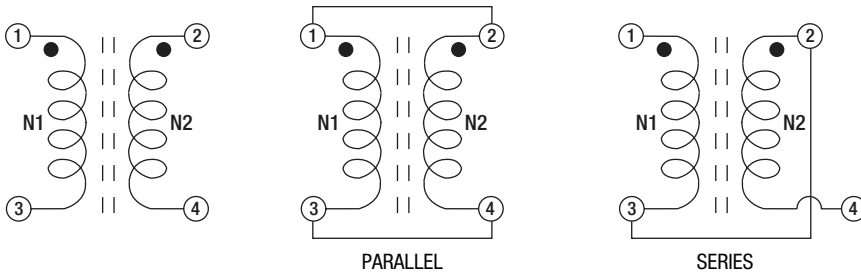
- Automotive systems:
 - Driver assistant
 - Information
 - Entertainment
 - Lighting
- DC/DC converters
- Power supplies
- SEPIC - DC/DC converters

SRF0703A Series - Dual-Winding Shielded Power Inductors

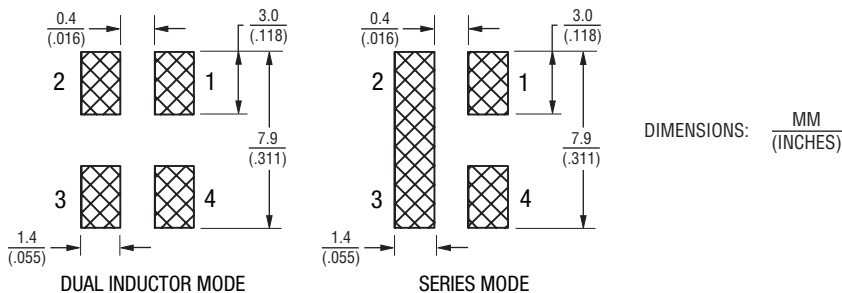
Electrical Specifications @ 25 °C

Bourns Part No.	Parallel Rating				Series Rating			
	Inductance @ 100 kHz / 0.25 V L (μ H) \pm 20 %	DCR (Ω) Max.	I _{rms} (A)	Isat (A)	Inductance @ 100 kHz / 0.25 V L (μ H) \pm 20 %	DCR (Ω) Max.	I _{rms} (A)	Isat (A)
SRF0703A-8R2M	8.2	0.0772	2.19	2.66	34.1	0.306	1.1	1.33
SRF0703A-100M	10	0.0826	2.08	2.47	39.6	0.342	1.04	1.24
SRF0703A-150M	15	0.119	1.83	2.05	59.6	0.47	0.916	1.03
SRF0703A-220M	22	0.15	1.62	1.67	89.5	0.62	0.811	0.83
SRF0703A-330M	33	0.24	1.31	1.35	140.5	1.0	0.653	0.68
SRF0703A-470M	47	0.338	1.08	1.14	194.2	1.28	0.542	0.57
SRF0703A-680M	68	0.507	0.89	0.96	289.3	1.92	0.444	0.48
SRF0703A-820M	82	0.61	0.86	0.89	324.7	2.28	0.43	0.44
SRF0703A-101M	100	0.715	0.73	0.79	397.6	2.64	0.367	0.39
SRF0703A-151M	150	0.986	0.58	0.65	608.2	3.63	0.289	0.32
SRF0703A-221M	220	1.48	0.52	0.53	922.6	5.5	0.26	0.27
SRF0703A-331M	330	2.16	0.42	0.44	1335	8.25	0.211	0.22

Electrical Schematics



Recommended Layout



How to Order

SRF0703A - 100M

Model _____
Value Code (see table) _____

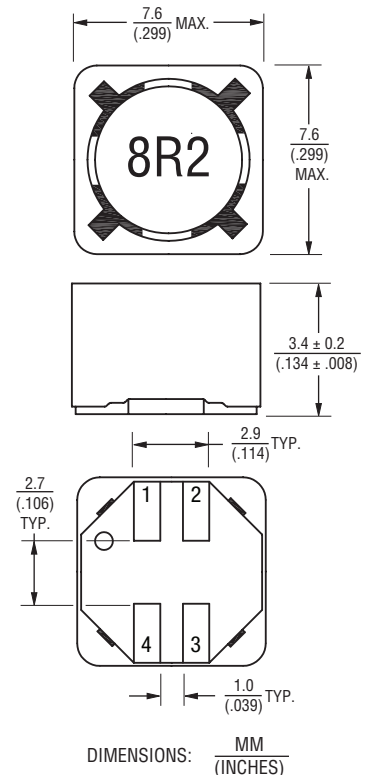
General Specifications

Operating Temperature -40 °C to +125 °C
(Temperature rise included)
Storage Temperature -40 °C to +125 °C
Resistance to Solder Heat +250 °C for 10 sec.
Temperature Rise 40 °C typ. at rated I_{rms}
Inductance Drop 30 % typ. at Isat
Hi-pot (N1-N2) 500 Vac/60 Hz, 3 mA, 1 sec
Moisture Sensitivity Level 1
ESD Classification (HBM) N/A

Materials

Core Ferrite
Wire Enameled copper
Terminal Finish Sn
Packaging 1500 pcs. per reel

Product Dimensions



* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

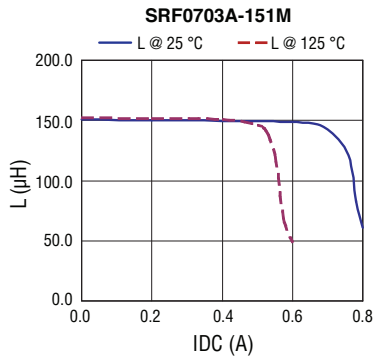
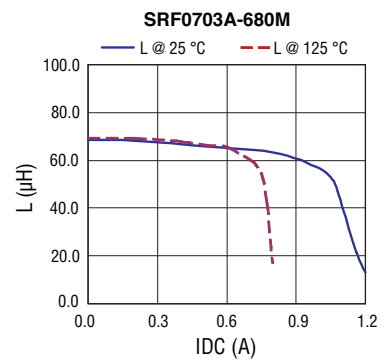
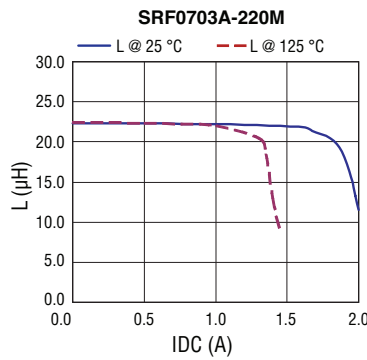
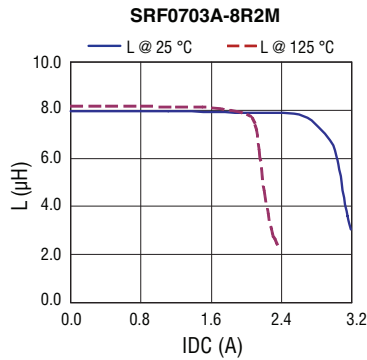
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less. Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

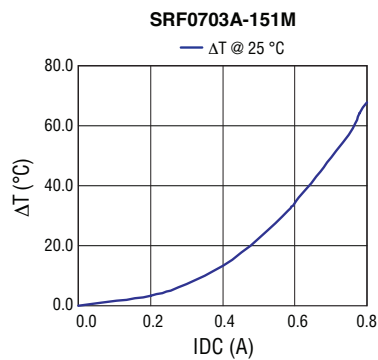
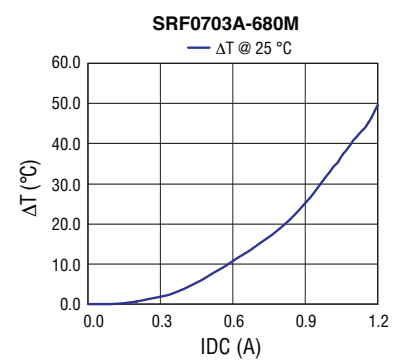
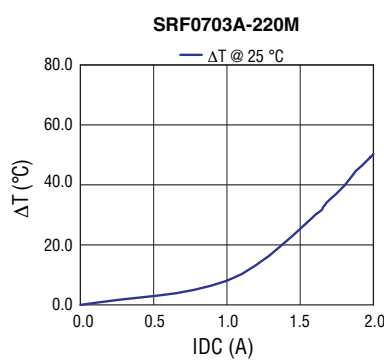
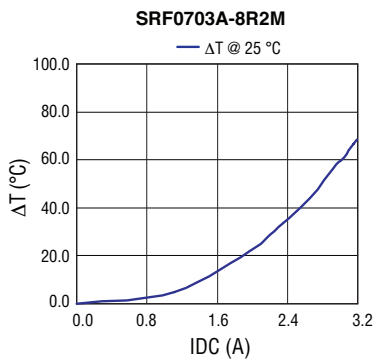
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Inductance vs. IDC



Temperature Rise vs. IDC

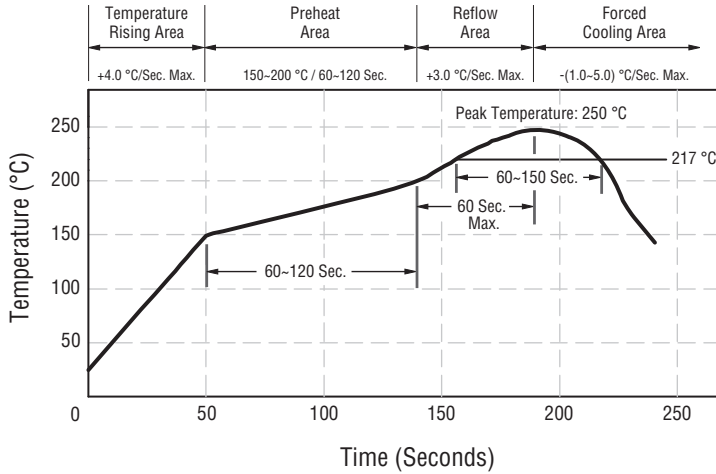


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Soldering Profile

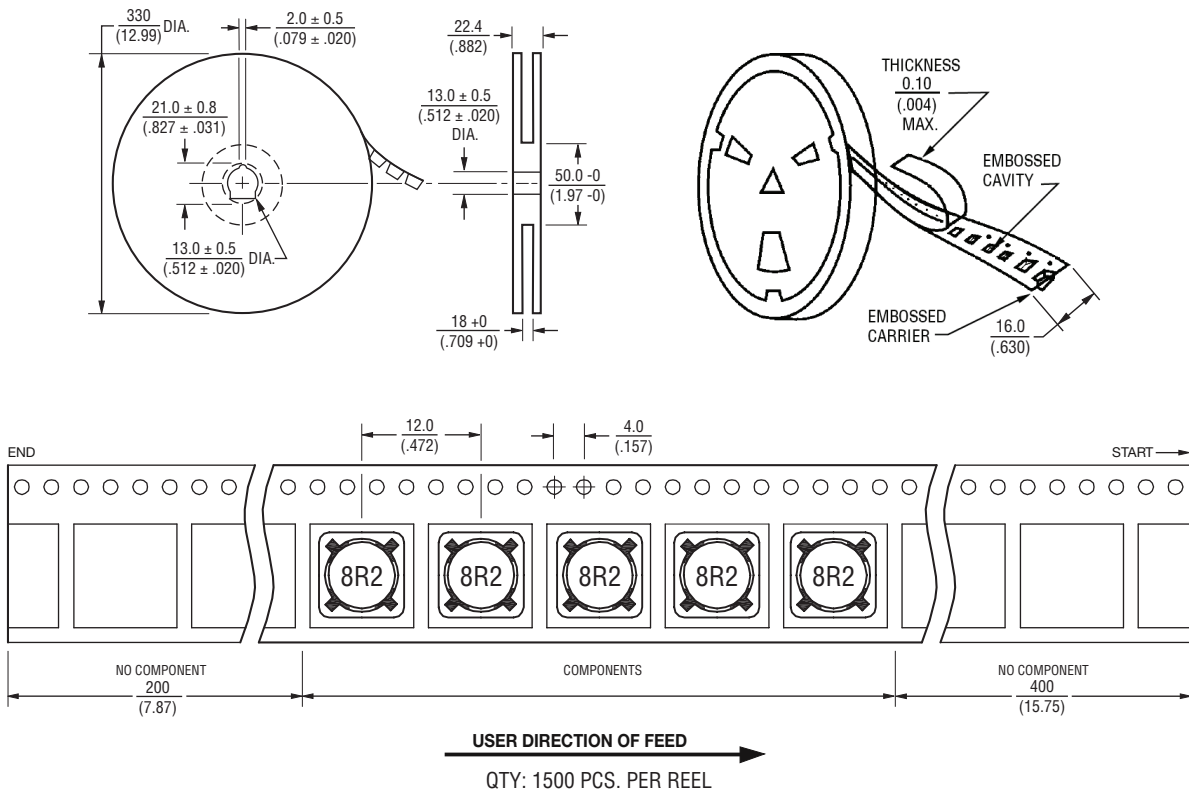


Peak Temperature:
250 °C max.

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

Max. Time Above 217 °C:
90-150 sec. max.

Packaging Specifications



REV. 05/18

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

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