

### **Features**

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

# **Applications**

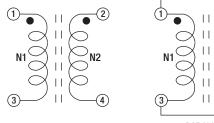
- DC/DC converters
- Power supplies
- SEPIC DC/DC converters

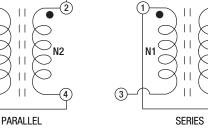
# SRF0703A Series - Dual-Winding Shielded Power Inductors

### Electrical Specifications @ 25 °C

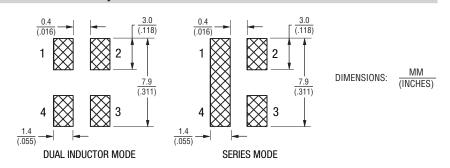
	Parallel Rating				Series Rating			
Bourns Part No.	Inductance @ 100 kHz / 0.25 V L (μH) ±20 %	DCR (Ω) Max.	Irms (A)	Isat (A)	Inductance @ 100 kHz / 0.25 V L (μH) ±20 %	DCR (Ω) Max.	Irms (A)	Isat (A)
SRF0703A-8R2M	8.2	0.0772	2.19	2.66	34.1	0.306	1.1	1.33
SRF0703A-100M	10	0.0826	2.08	2.47	39.6	0.342	1.04	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





WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

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

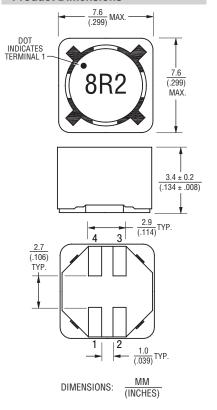
\*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (CI) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (CI) content is 1500 ppm or less.

Specifications are subject to change without notice. Users should verify actual device performance in their specific applications.

### **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 Irms 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**



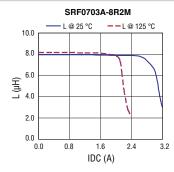
# **SRF0703A Series - Dual-Winding Shielded Power Inductors**

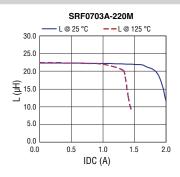
#### **How to Order**

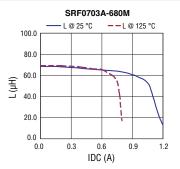
SRF0703A - 100M

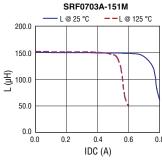
Model — Value Code (see table) —

#### Inductance vs. IDC

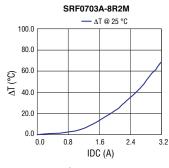


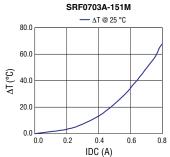


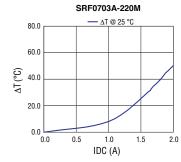


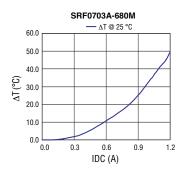


#### Temperature Rise vs. IDC



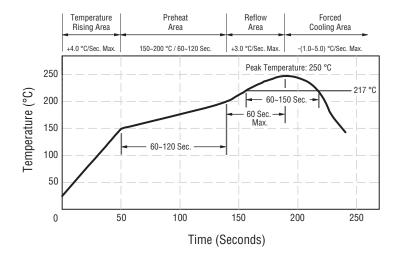






# **BOURNS**®

### **Soldering Profile**

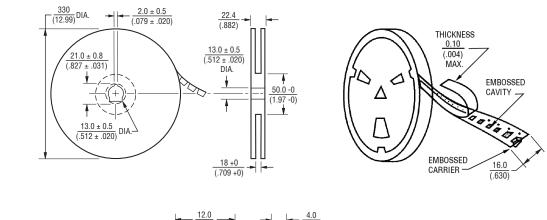


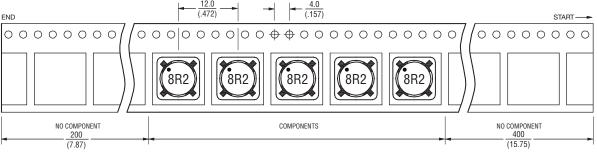
Peak Temperature: 250 ° C max.

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

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

## **Packaging Specifications**





QTY: 1500 PCS. PER REEL

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

REV. 11/18

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