

#### **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**

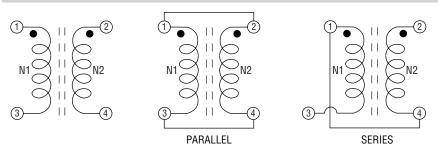
- DC/DC converters
- Power supplies
- SEPIC DC/DC converters

## SRF0703A Series - Dual-Winding Shielded Power Inductors

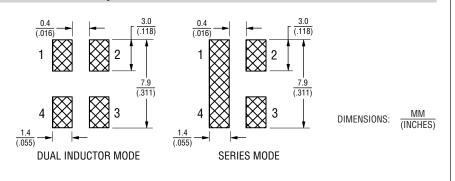
#### Electrical Specifications @ 25 °C

	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**



## **General Specifications**

**Operating Temperature** 

-40 °C to +125 °C (Temperature rise included)

Storage Temperature

.....-40 °C to +125 °C

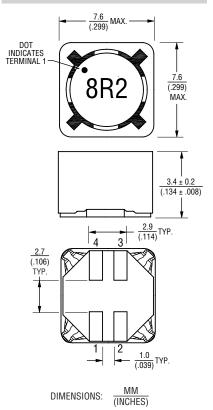
Temperature Rise

......40 °C typ. at rated Irms Inductance Drop .......30 % typ. at Isat Hi-pot (N1-N2) ......500 Vac/60 Hz, 3 mA, 1 sec

#### Materials

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

#### **Product Dimensions**



<sup>\*</sup> RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Users should verify actual device performance in their specific applications.

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<sup>\*\*</sup>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.

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

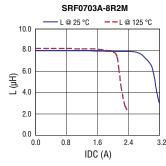
## BOURNS

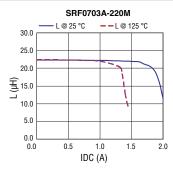
#### **How to Order**

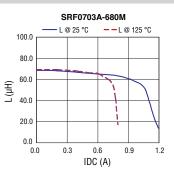
SRF0703A - 100M

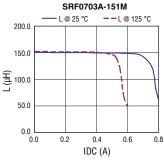
Model — Value Code (see table) —

#### Inductance vs. IDC

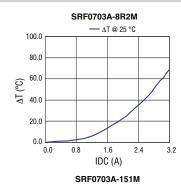


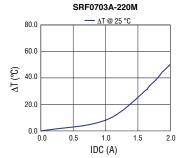


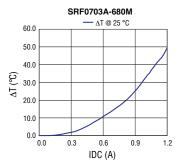


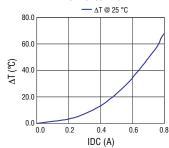


#### Temperature Rise vs. IDC







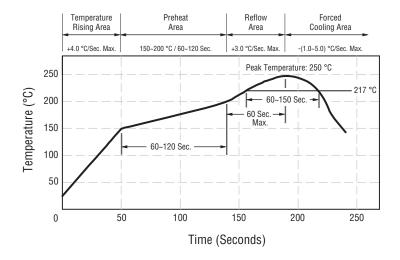


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## **SRF0703A Series – Dual-Winding Shielded Power Inductors**

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#### **Soldering Profile**

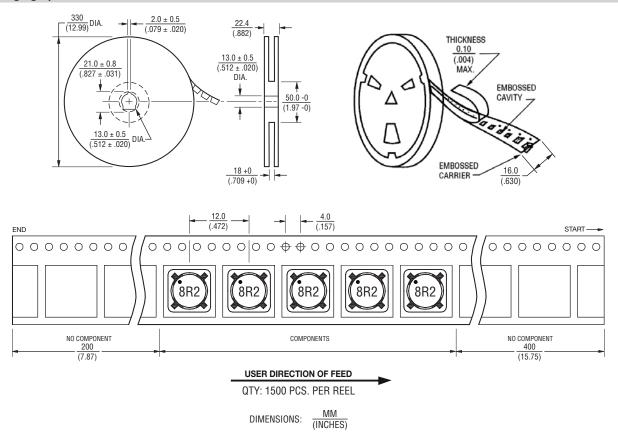


Peak Temperature: 250 ° C max.

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

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

#### **Packaging Specifications**



REV. 04/20

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