# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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### **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 qualified
- RoHS compliant\* and halogen free\*\*

## **Applications**

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

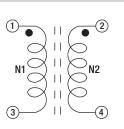
SRF0703A Series - Dual-Winding Shielded Power Inductors

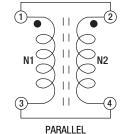
■ SEPIC - DC/DC converters

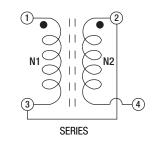
#### Electrical Specifications @ 25 °C

	Parallel Rating				Series Rating			
Bourns Part No.	Inductance @ 100 kHz / 0.25 V L (μH) ±20 %	DCR (Ω) Max.	Irms (A)	lsat (A)	Inductance @ 100 kHz / 0.25 V L (μH) ±20 %	DCR (Ω) Max.	Irms (A)	lsat (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

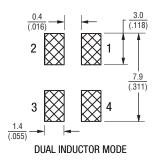
#### **Electrical Schematics**

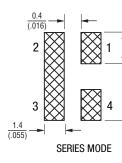


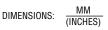




#### **Recommended Layout**







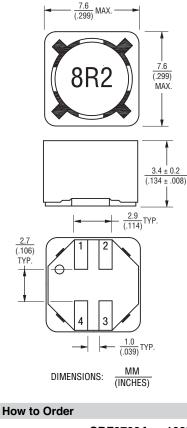
## **General Specifications Operating Temperature**

-40 °C to +125 °C				
(Temperature rise included)				
Storage Temperature				
40 °C to +125 °C				
Resistance to Solder Heat				
+250 °C for 10 sec.				
Temperature Rise				

#### Materials

Ferrite
Enameled copper
Sn
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 (CI) 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.

3.0

(.118)

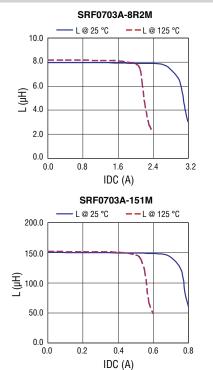
7.9

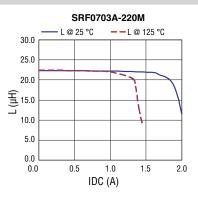
(.311)

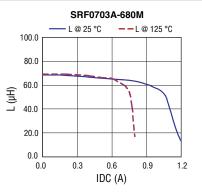
## SRF0703A Series - Dual-Winding Shielded Power Inductors

## BOURNS

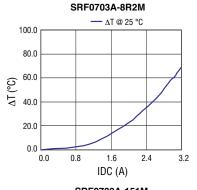
#### Inductance vs. IDC

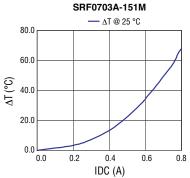


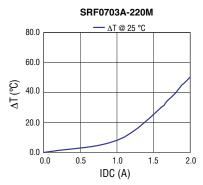


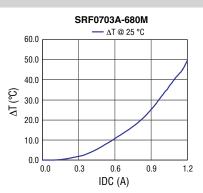


Temperature Rise vs. IDC









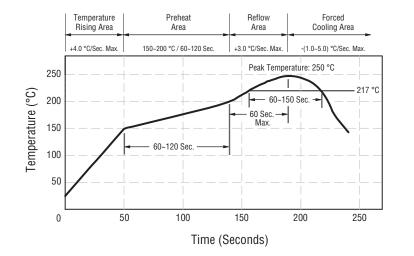
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## SRF0703A Series - Dual-Winding Shielded Power Inductors

BOURNS

#### **Soldering Profile**

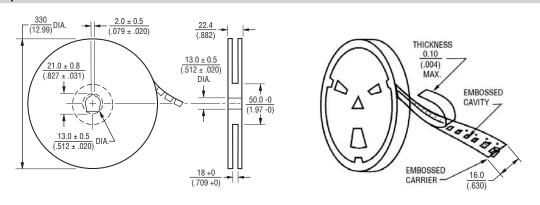


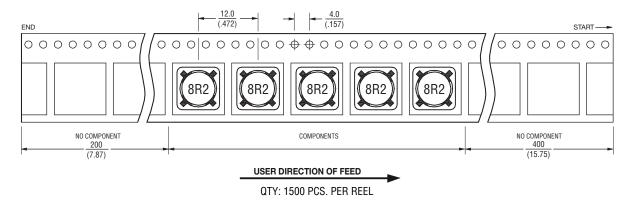
Peak Temperature: 250 ° C max.

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

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

#### **Packaging Specifications**





MM (INCHES)

#### REV. 03/15

Specifications are subject to change without notice.

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DIMENSIONS: