



**THE DATASHEET OF  
SRF0703A-220M**





### Features

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

### Applications

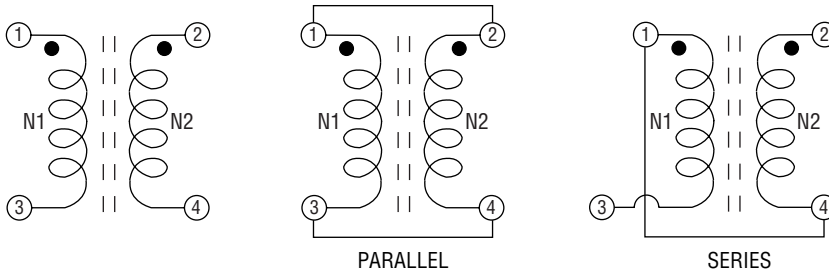
- DC/DC converters
- Power supplies
- SEPIC - DC/DC converters

## SRF0703A Series - Dual-Winding Shielded Power Inductors

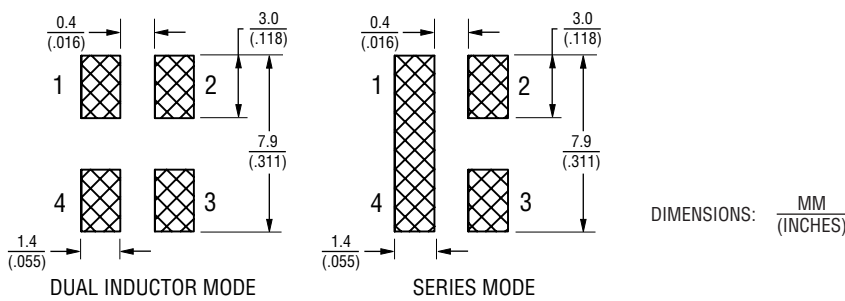
### Electrical Specifications @ 25 °C

Bourns Part No.	Parallel Rating				Series Rating			
	Inductance @ 100 kHz / 0.25 V L ( $\mu$ H) $\pm$ 20 %	DCR ( $\Omega$ ) Max.	I <sub>rms</sub> (A)	Isat (A)	Inductance @ 100 kHz / 0.25 V L ( $\mu$ H) $\pm$ 20 %	DCR ( $\Omega$ ) Max.	I <sub>rms</sub> (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



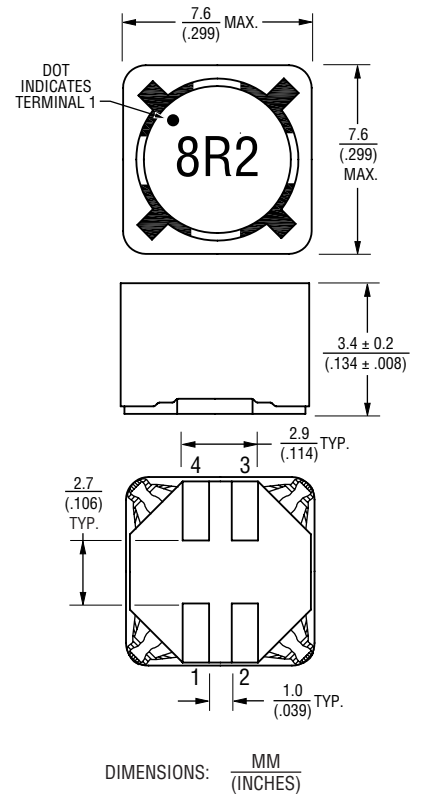
### General Specifications

Operating Temperature .....-40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature .....-40 °C to +125 °C  
 Temperature Rise .....40 °C typ. at rated I<sub>rms</sub>  
 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 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 (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.

Users should verify actual device performance in their specific applications.

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**WARNING**  
 Cancer and Reproductive Harm  
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# SRF0703A Series – Dual-Winding Shielded Power Inductors



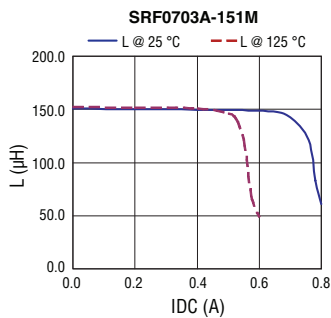
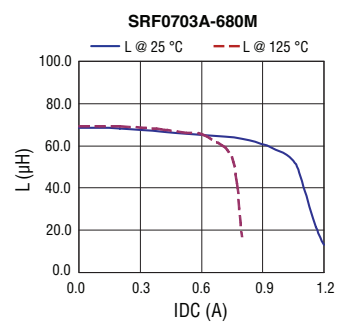
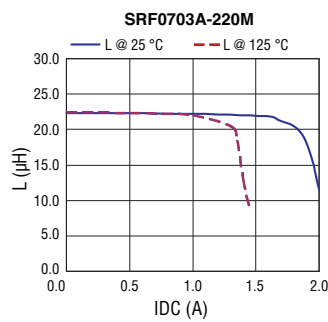
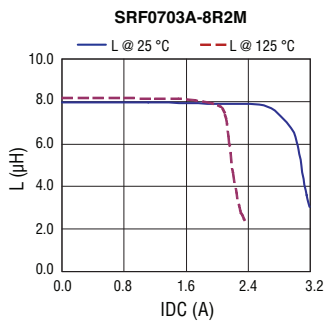
## How to Order

SRF0703A - 100M

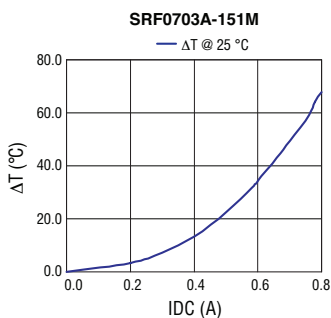
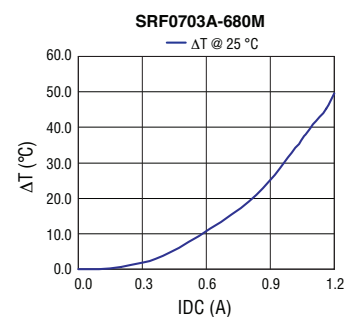
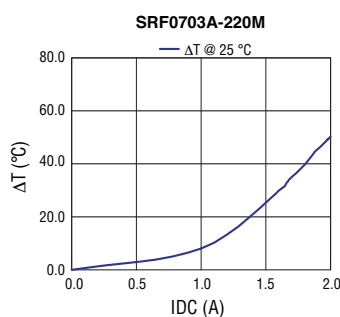
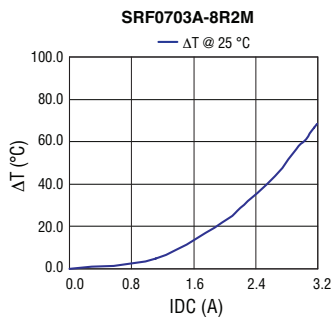
Model

Value Code (see table)

## Inductance vs. IDC



## Temperature Rise vs. IDC

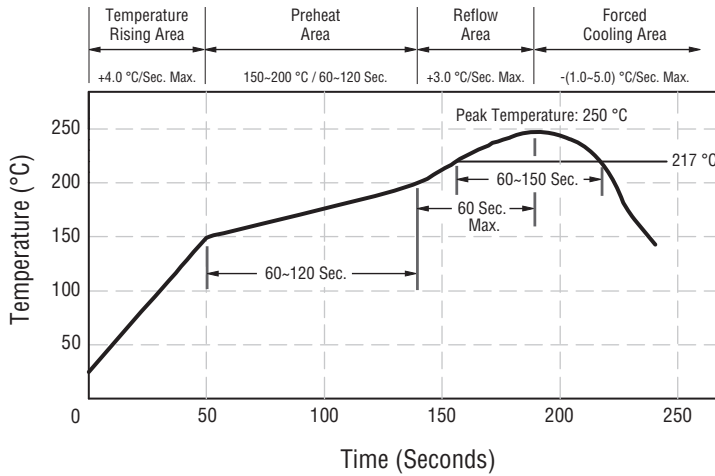


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# SRF0703A Series – Dual-Winding Shielded Power Inductors

**BOURNS®**

## Soldering Profile

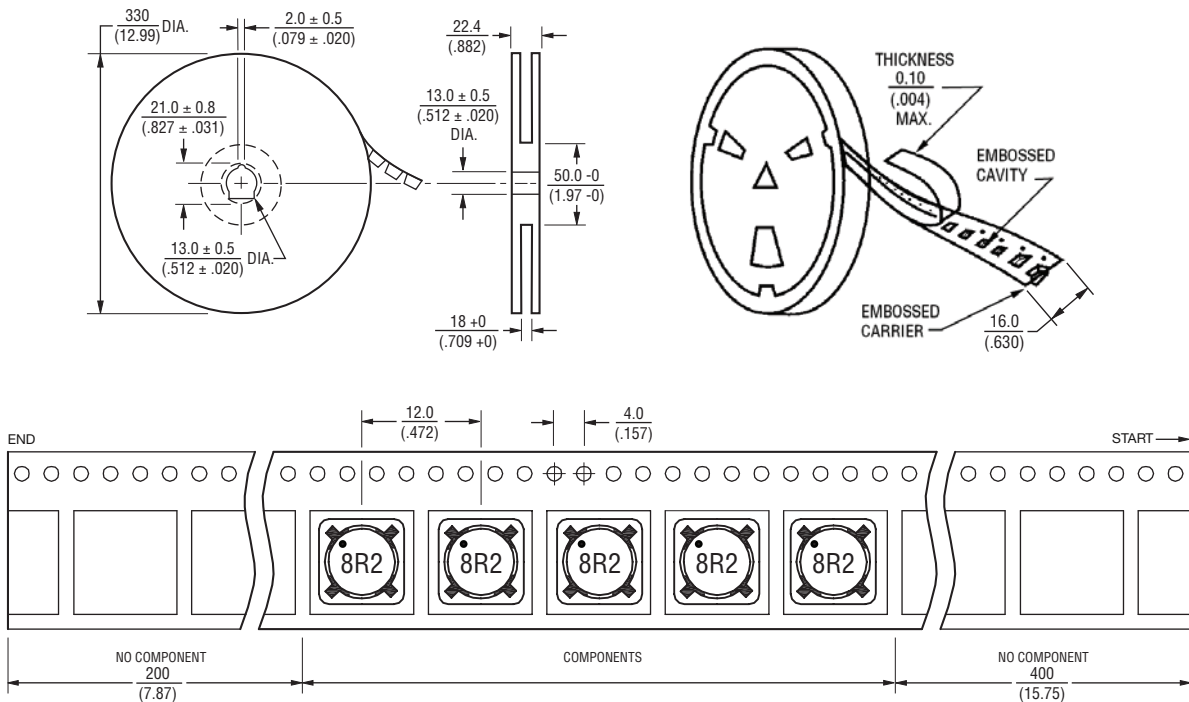


Peak Temperature:  
250 °C max.

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

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

## Packaging Specifications



USER DIRECTION OF FEED →

QTY: 1500 PCS. PER REEL

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

REV. 04/20

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