

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

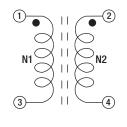
- DC/DC converters
- Power supplies
- SEPIC DC/DC converters

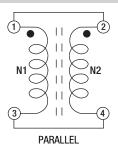
SRF0703A Series - Dual-Winding Shielded Power Inductors

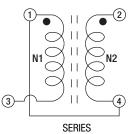
Electrical Specifications @ 25 °C

| | 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 |

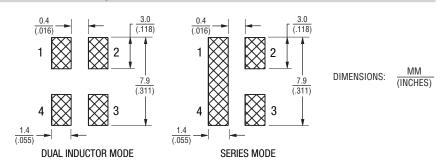
Electrical Schematics







Recommended Layout



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

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 (CI) content is 1500 ppm or less.

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

.....-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 Rise40 °C typ. at rated Irms Inductance Drop30 % 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

General Specifications Operating Temperature

Product Dimensions $\frac{7.6}{(.299)}$ MAX. DOT INDICATES TERMINAL 1 (.299)MAX 3.4 ± 0.2 $(.134 \pm .008)$ $\frac{2.9}{(.114)}$ TYP. 3 (.106) TYP. $\frac{1.0}{(.039)}$ TYP.

DIMENSIONS:

(INCHES)

WireEnameled copper Terminal FinishSn Packaging......1500 pcs. per reel

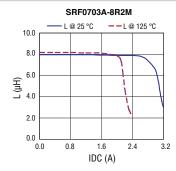
SRF0703A Series - Dual-Winding Shielded Power Inductors

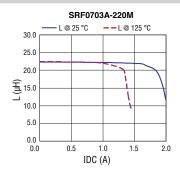
How to Order

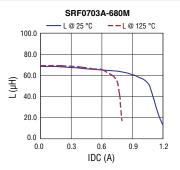
SRF0703A - 100M

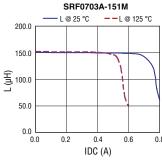
Model — Value Code (see table) —

Inductance vs. IDC

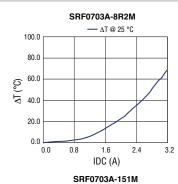


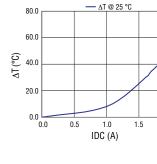






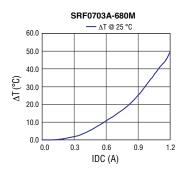
Temperature Rise vs. IDC

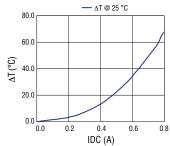




SRF0703A-220M

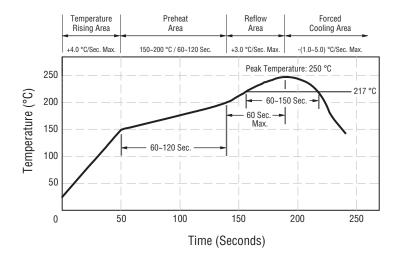
2.0





BOURNS®

Soldering Profile

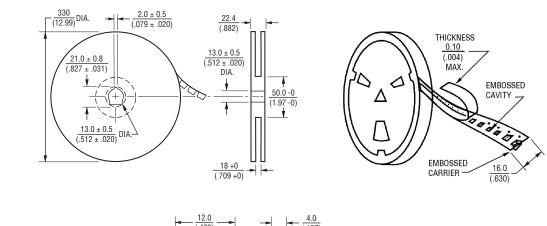


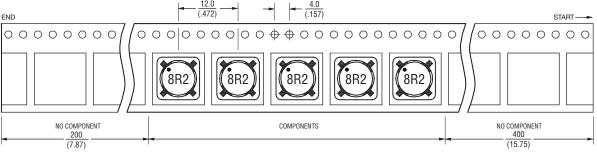
Peak Temperature: 250 ° C max.

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

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

Packaging Specifications





QTY: 1500 PCS. PER REEL

REV. 11/18 DIMENSIONS: MM (INCHES)

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