



Features

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

Applications

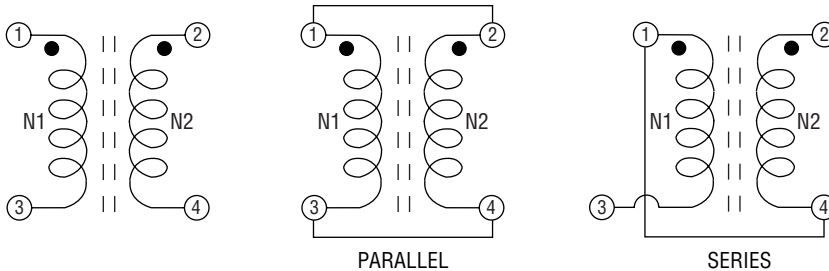
- DC/DC converters
- Power supplies
- SEPIC - DC/DC converters

SRF0703A Series - Dual-Winding Shielded Power Inductors

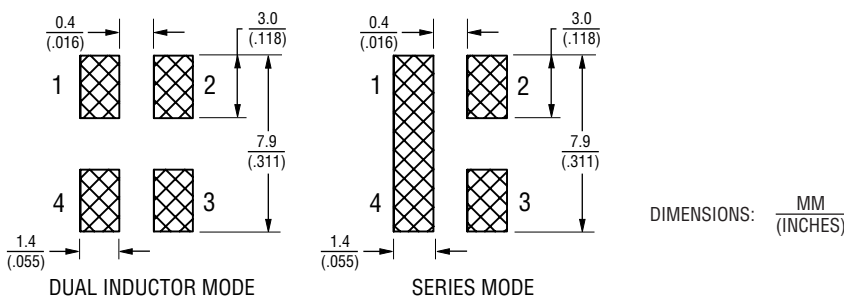
Electrical Specifications @ 25 °C

| Bourns Part No. | Parallel Rating | | | | Series Rating | | | |
|-----------------|---|-----------------------|----------------------|----------|---|-----------------------|----------------------|----------|
| | Inductance @ 100 kHz / 0.25 V L (μ H) \pm 20 % | DCR (Ω) Max. | I _{rms} (A) | Isat (A) | Inductance @ 100 kHz / 0.25 V L (μ H) \pm 20 % | DCR (Ω) Max. | I _{rms} (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



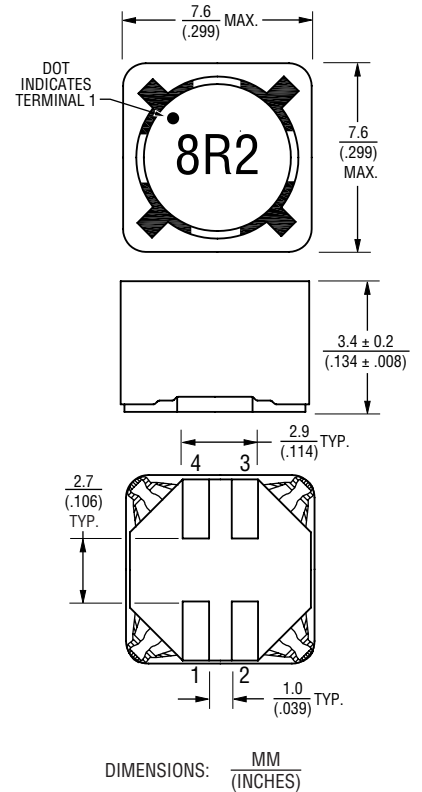
General Specifications

Operating Temperature-40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature-40 °C to +125 °C
 Temperature Rise40 °C typ. at rated I_{rms}
 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
 WireEnameled copper
 Terminal FinishSn
 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
www.P65Warnings.ca.gov

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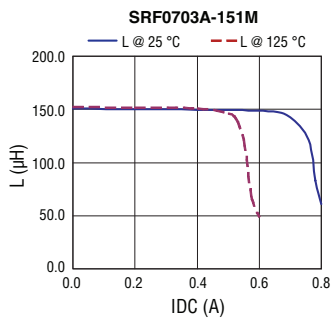
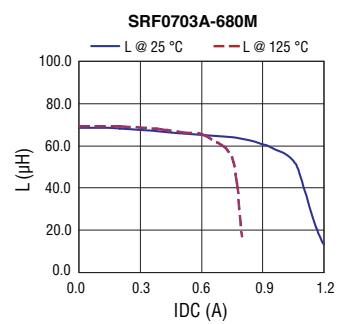
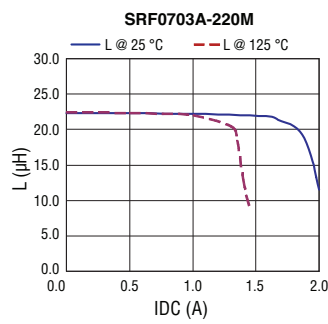
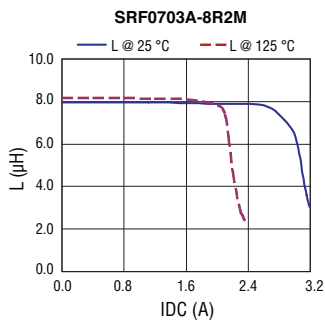


How to Order

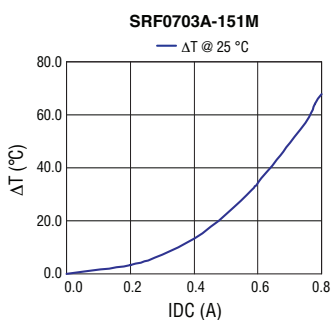
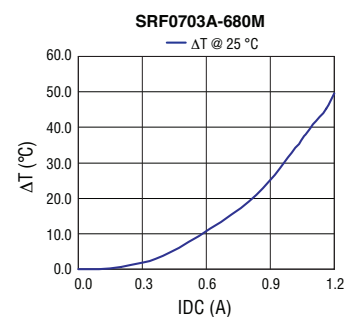
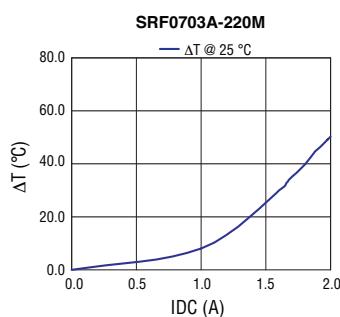
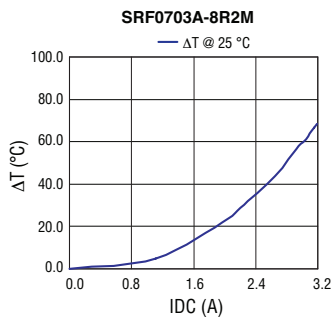
SRF0703A - 100M

Model _____
 Value Code (see table) _____

Inductance vs. IDC



Temperature Rise vs. IDC

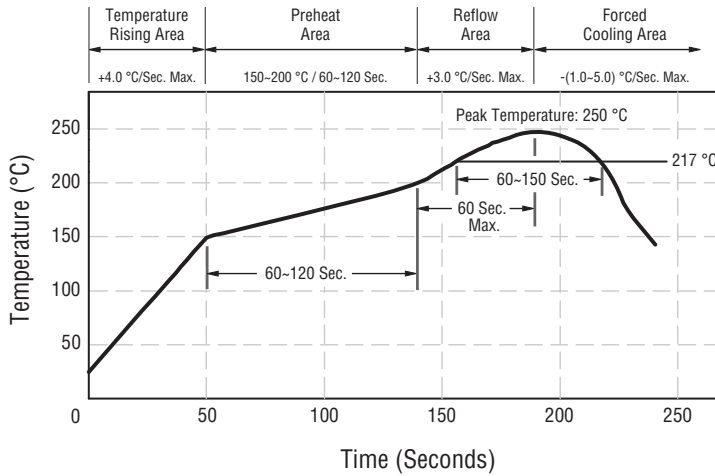


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BOURNS®

Soldering Profile

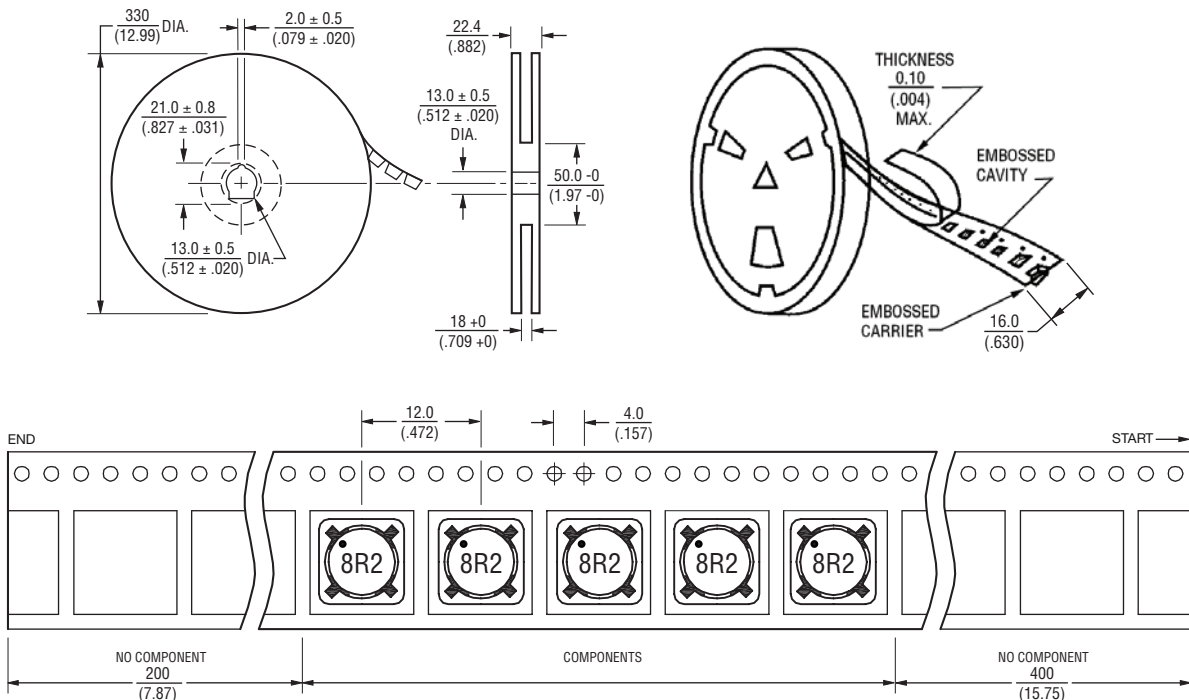


Peak Temperature:
250 °C max.

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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