



**THE DATASHEET OF  
SRF0703-R33M**





### Features

- Multiple applications: parallel, series, dual-inductor and transformer
- Magnetically shielded, low radiation
- Inductance range: 0.33 to 4000  $\mu$ H
- Rated current up to 6.19 A
- RoHS compliant\*

### Applications

- SEPIC topology
- Power supplies for:
  - Communication equipment
  - Notebooks, desktop computers, servers
  - LCDs, flat panels, backlights
  - Camcorders, HDTVs

## SRF0703 Series - Dual-Winding Shielded Power Inductors

### Electrical Specifications @ 25 °C

Bourns Part No.	Parallel Rating				Series Rating			
	Inductance @ 100 KHz L ( $\mu$ H) $\pm$ 20 %	DCR ( $\Omega$ ) Max.	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)	Inductance @ 100 KHz L ( $\mu$ H) $\pm$ 20 %	DCR ( $\Omega$ ) Max.	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)
SRF0703-R33M	0.33	0.0092	6.19	14.4	1.34	0.04	3.1	7.18
SRF0703-1R0M	1.0	0.0135	5.25	7.97	3.86	0.072	2.63	3.99
SRF0703-1R5M	1.5	0.0191	4.64	6.52	5.83	0.11	2.32	3.26
SRF0703-2R2M	2.2	0.0217	4.11	5.52	8.13	0.132	2.06	2.76
SRF0703-3R3M	3.3	0.0316	3.31	4.22	13.60	0.182	1.66	2.11
SRF0703-4R7M	4.7	0.0406	3.09	3.78	17.10	0.242	1.55	1.89
SRF0703-6R8M	6.8	0.0658	2.55	3.12	25.50	0.285	1.28	1.56
SRF0703-8R2M	8.2	0.0772	2.19	2.66	34.10	0.306	1.1	1.33
SRF0703-100M	10	0.0826	2.08	2.47	39.60	0.342	1.04	1.24
SRF0703-150M	15	0.119	1.83	2.05	59.60	0.47	0.916	1.03
SRF0703-220M	22	0.15	1.62	1.67	89.50	0.62	0.811	0.83
SRF0703-330M	33	0.24	1.31	1.35	140.50	1.0	0.653	0.68
SRF0703-470M	47	0.338	1.08	1.14	194.20	1.28	0.542	0.57
SRF0703-680M	68	0.507	0.89	0.96	289.30	1.92	0.444	0.48
SRF0703-820M	82	0.61	0.86	0.89	324.70	2.28	0.43	0.44
SRF0703-101M	100	0.715	0.73	0.79	397.60	2.64	0.367	0.39
SRF0703-151M	150	0.986	0.58	0.65	608.20	3.63	0.289	0.32
SRF0703-221M	220	1.48	0.52	0.53	922.60	5.5	0.26	0.27
SRF0703-331M	330	2.16	0.42	0.44	1335.00	8.25	0.211	0.22
SRF0703-471M	470	2.82	0.35	0.37	1859.00	11.22	0.173	0.18
SRF0703-681M	680	3.96	0.29	0.31	2930.00	16.17	0.143	0.15
SRF0703-821M	820	5.01	0.27	0.28	3559.00	20.07	0.134	0.14
SRF0703-102M	1000	6.11	0.26	0.25	4120.00	24.42	0.128	0.13

### General Specifications

Test Voltage .....0.25 V  
 Hi-pot .....500 Vrms, 3 mA, 3 sec.  
 Reflow Soldering .. 230 °C; 50 sec. max.  
 Operating Temperature  
 .....-40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature ..-40 °C to +125 °C  
 Resistance to Solder Heat  
 .....+260 °C for 10 sec.  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM) ..... N/A

### Materials

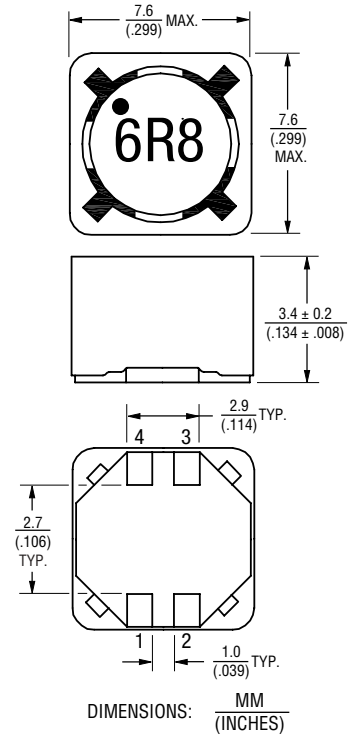
Core.....Ferrite  
 Wire ..... Enameled copper  
 Base ..... LCP  
 Adhesive..... Epoxy resin  
 Terminal ..... Cu/Ni/Sn  
 Rated Current  
 ..... Inductance drops 30 % at I<sub>sat</sub>  
 Temperature Rise .... 40 °C at rated I<sub>rms</sub>  
 Packaging..... 1500 pcs. per 13-inch reel

### How to Order

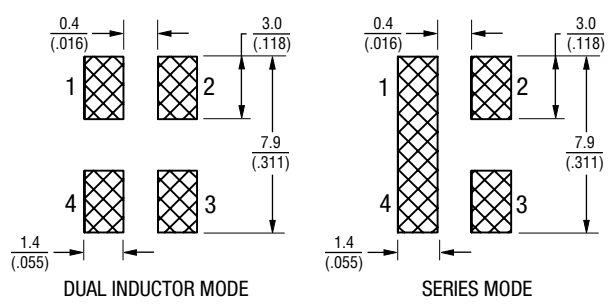
**SRF0703 - 100M**

Model \_\_\_\_\_  
 Value Code (see table) \_\_\_\_\_

### Product Dimensions



### Recommended Layout



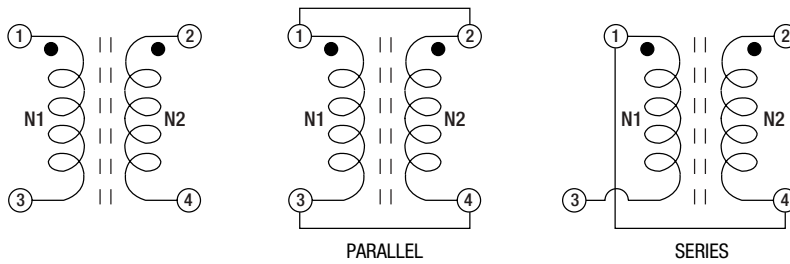
**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
 Specifications are subject to change without notice.  
 Users should verify actual device performance in their specific applications.  
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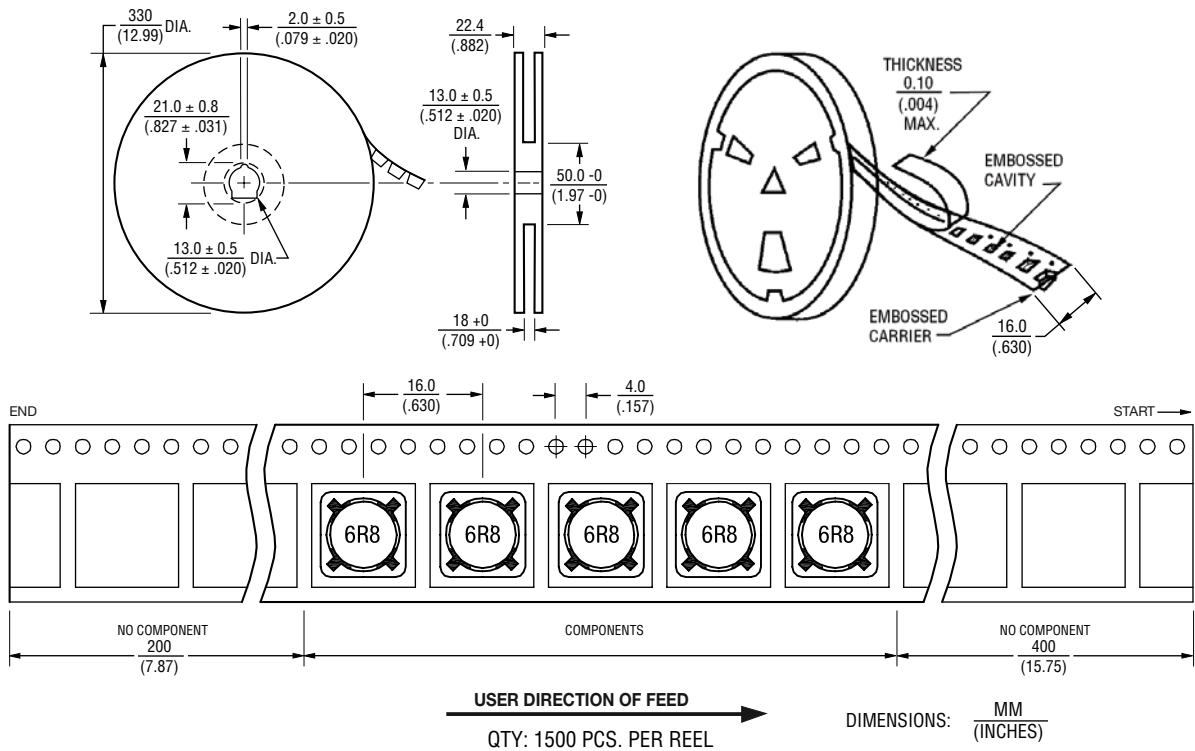
# SRF0703 Series - Dual-Winding Shielded Power Inductors

**BOURNS®**

## Electrical Schematic



## Packaging Specifications



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