



THE DATASHEET OF SRE6603-681M



Features

- Unit height of 2.9 mm
- Inductance range: 1500 to 10,000 μ H
- Rated current up to 0.12 A
- RoHS compliant*

Applications

- DC/DC converters
- Power supplies for:
 - Portable communication equipment
 - Laptop computers
 - Camcorders, HDTV

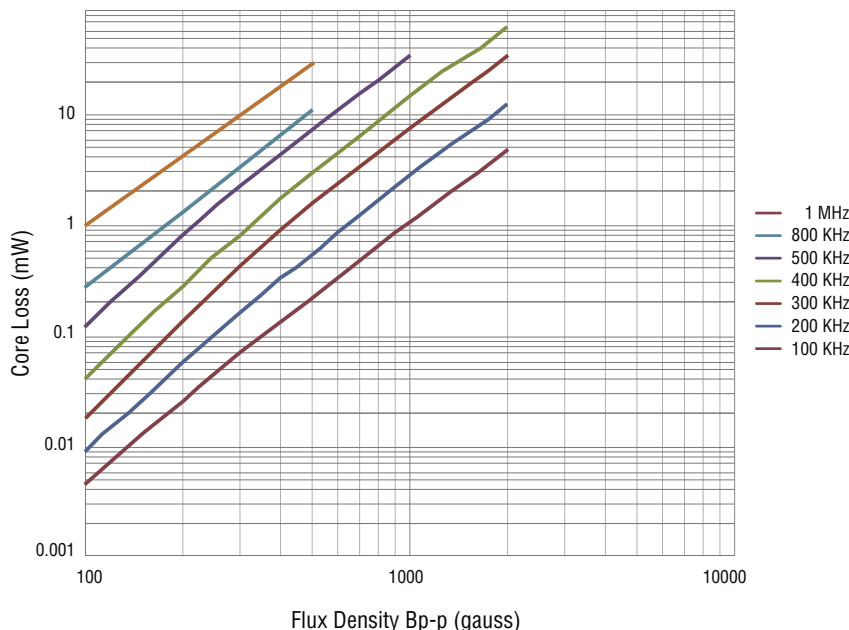
SRE6603 Series - Shielded SMD Power Inductors

Electrical Characteristics

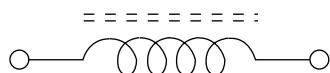
Bourns Part No.	Inductance @ 100 KHz L (μ H) $\pm 20\%$	Q (Ref.)	Test Freq. (KHz)	SRF (MHz) Typ.	DCR (Ω) Max.	I _{rms} (A)	I _{sat} (A)	**K -Factor
SRE6603-152M	1500	50	100	2	4.2	0.12	0.035	82
SRE6603-222M	2200	50	100	2	8.5	0.10	0.028	68
SRE6603-332M	3300	50	100	1	11	0.08	0.024	53
SRE6603-472M	4700	50	100	1	13.9	0.06	0.021	48
SRE6603-682M	6800	50	100	1	25	0.04	0.019	37
SRE6603-103M	10,000	50	100	0.8	32.8	0.02	0.017	31

**K-Factor: To calculate core flux density, Bp-p (gauss) = $K \times L(\mu H) \times \Delta I$ (peak-to-peak ripple current, A), determine core loss from *Core Loss vs. Flux Density* plot.

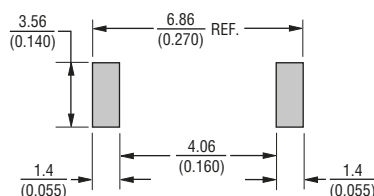
Core Loss vs. Flux Density



Schematic



Recommended Layout



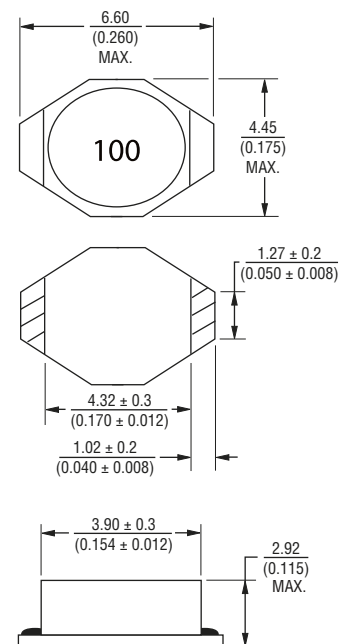
General Specifications

Test Voltage 0.1 V
 Reflow Soldering ... 230 °C, 50 sec max.
 Operating Temperature
 -25 °C to +105 °C
 (Temperature rise included)
 Storage Temperature
 -40 °C to +125 °C
 Resistance to Soldering Heat
 260 °C for 10 sec.
 Moisture Sensitivity Level 1
 ESD Classification (HBM) N/A

Materials

Core Ferrite
 Wire Enamelled copper
 Base Ceramic
 Adhesive Epoxy resin
 Terminal Ag/Ni/Au
 Rated Current
 Ind. drop of 30 % typ. at Isat
 Temperature Rise ... 40 °C typical at I_{rms}
 Packaging 2000 pcs. per 13-inch reel

Product Dimensions



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



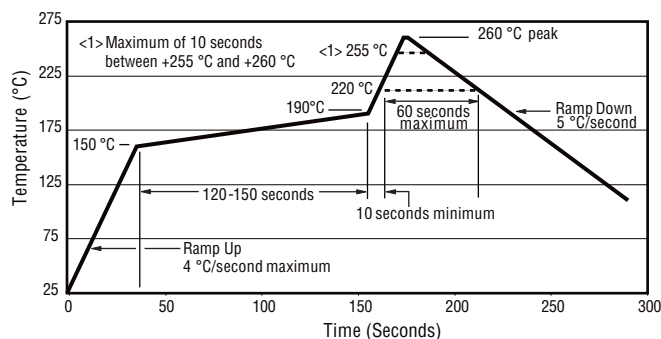
WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
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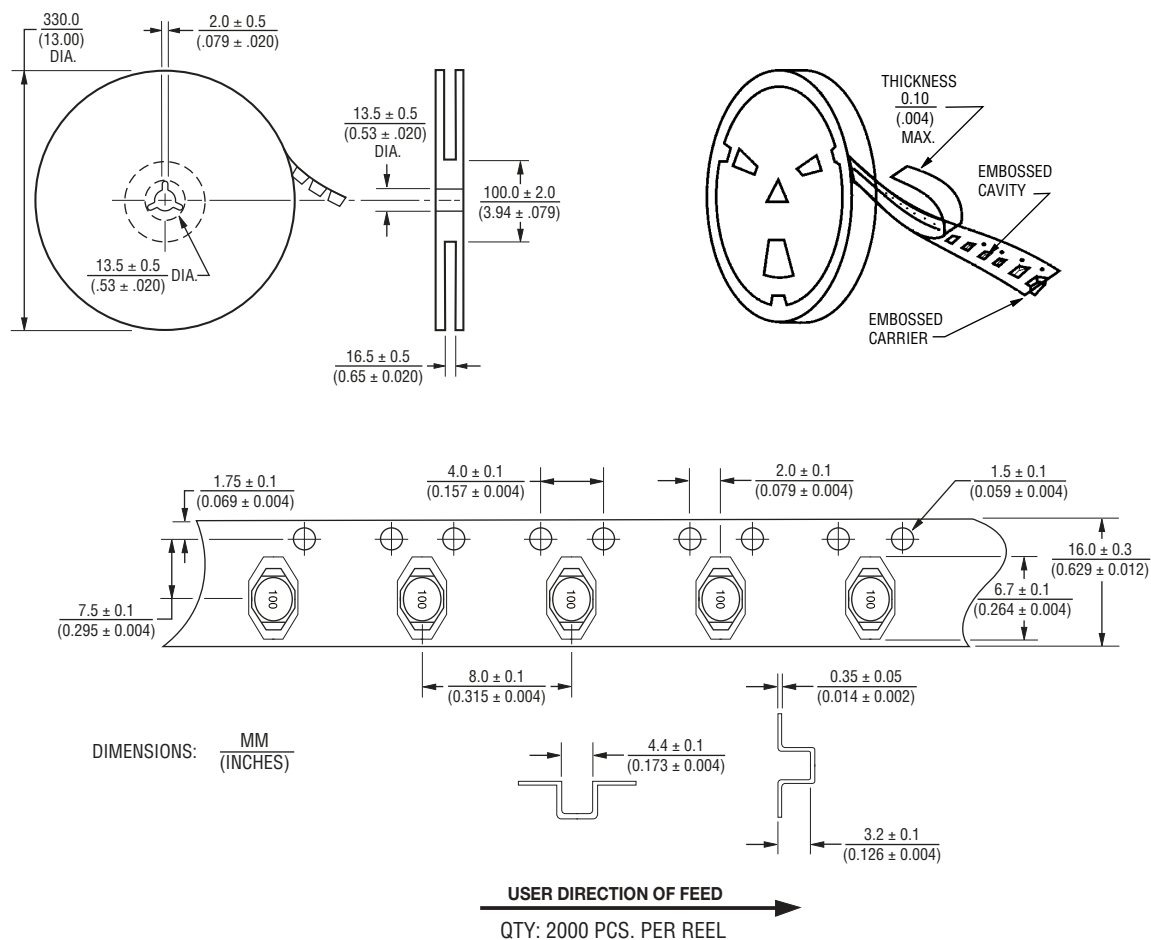
SRE6603 Series - Shielded SMD Power Inductors

BOURNS®

Soldering Profile



Packaging Specifications



REV. 03/18

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