



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

BOURNS®

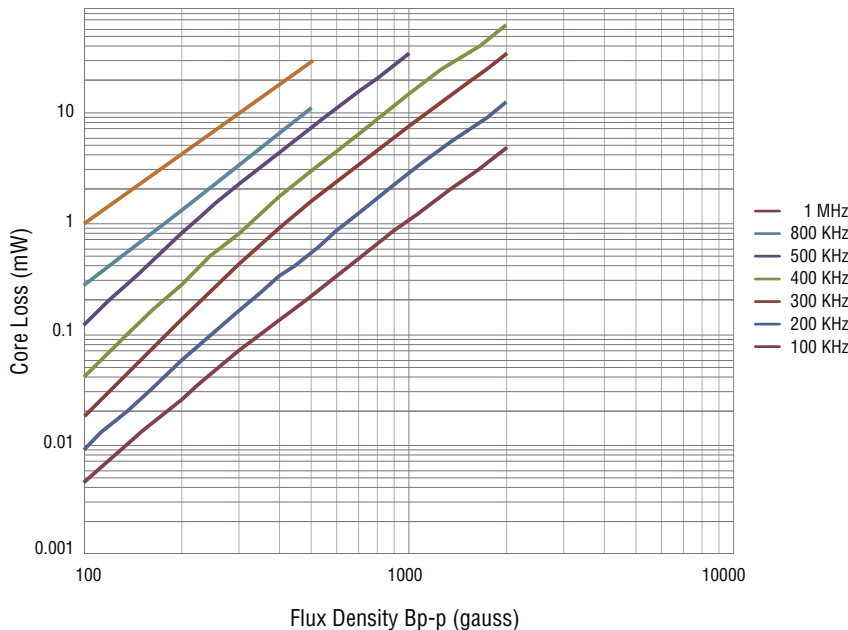
SRE6603 Series - Shielded SMD Power Inductors

Electrical Characteristics

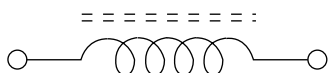
Bourns Part No.	Inductance @ 100 KHz L (μ H) $\pm 20\%$	Q (Ref.)	Test Freq. (KHz)	SRF (MHz) Typ.	DCR (Ω) Max.	I _{rms} (A)	I _{sat} (A)	**K -Factor
SRE6603-152M	1500	50	100	2	4.2	0.12	0.035	82
SRE6603-222M	2200	50	100	2	8.5	0.10	0.028	68
SRE6603-332M	3300	50	100	1	11	0.08	0.024	53
SRE6603-472M	4700	50	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, B_p -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.

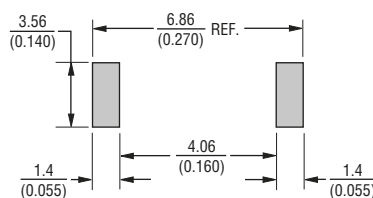
Core Loss vs. Flux Density



Schematic



Recommended Layout



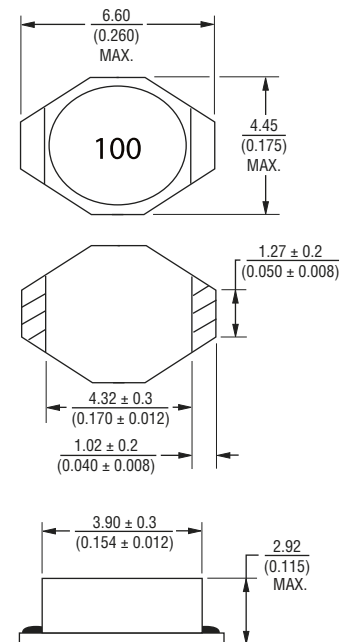
General Specifications

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



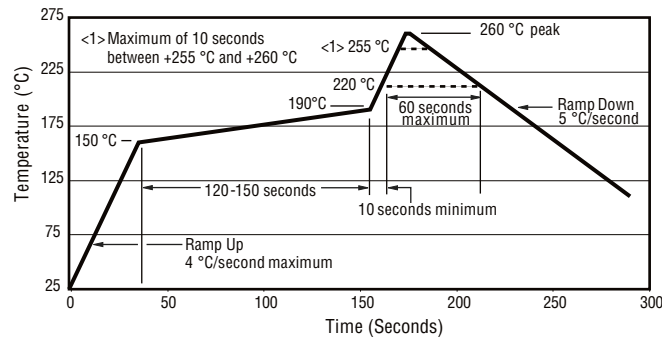
WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
 Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

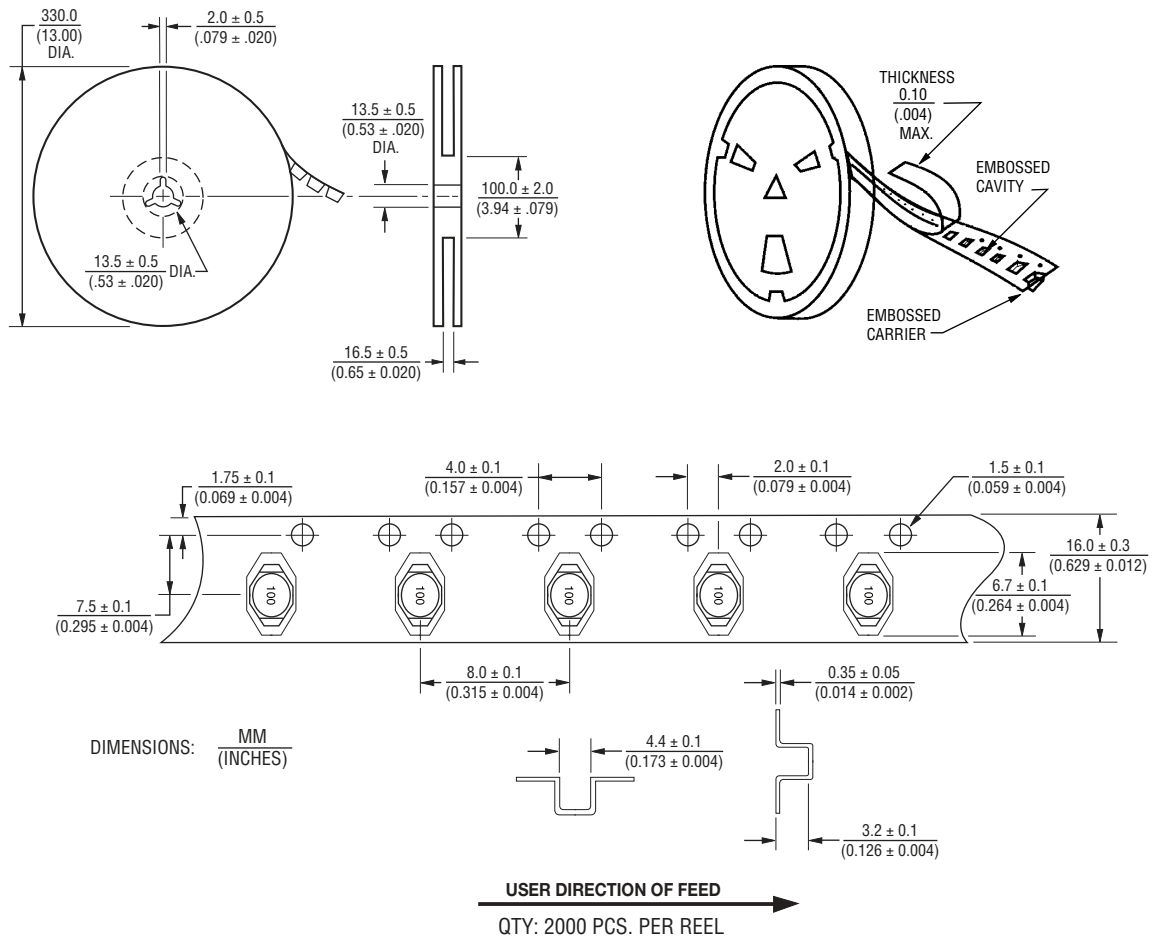
SRE6603 Series - Shielded SMD Power Inductors

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Soldering Profile



Packaging Specifications



REV. 03/18

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