



Features

- Height of 2.92 mm
- Current rating up to 2.9 amps
- RoHS compliant*

Applications

- Input/output of DC/DC converters
- Power supplies for:
 - Portable communications equipment
 - Camcorders
 - LCD TVs

SDR6603 Series - SMD Power Inductors

Electrical Specifications

| Bourns Part Number | Inductance 100 kHz | | Q Ref. | Test Frequency (MHz) | SRF Typ. (MHz) | RDC Max. (Ω) | I rms Max. (A) | I sat Typ. (A) |
|--------------------|--------------------|----------|--------|----------------------|----------------|-----------------------|----------------|----------------|
| | (μ H) | Tol. % | | | | | | |
| SDR6603-1R0M | 1.0 | ± 20 | 20 | 7.96 | 130 | 0.05 | 2.9 | 2.9 |
| SDR6603-1R5M | 1.5 | ± 20 | 19 | 7.96 | 115 | 0.05 | 2.8 | 2.6 |
| SDR6603-2R2M | 2.2 | ± 20 | 18 | 7.96 | 90 | 0.07 | 2.4 | 2.3 |
| SDR6603-3R3M | 3.3 | ± 20 | 18.5 | 7.96 | 70 | 0.08 | 2.0 | 2.0 |
| SDR6603-4R7M | 4.7 | ± 20 | 17 | 7.96 | 50 | 0.09 | 1.5 | 1.5 |
| SDR6603-6R8M | 6.8 | ± 20 | 15.5 | 7.96 | 45 | 0.13 | 1.4 | 1.2 |
| SDR6603-8R2M | 8.2 | ± 20 | 10 | 7.96 | 40 | 0.16 | 1.3 | 1.15 |
| SDR6603-100M | 10 | ± 20 | 17 | 2.52 | 35 | 0.16 | 1.1 | 1.1 |
| SDR6603-150M | 15 | ± 20 | 17 | 2.52 | 30 | 0.23 | 1.0 | 0.90 |
| SDR6603-220M | 22 | ± 20 | 16 | 2.52 | 20 | 0.37 | 0.80 | 0.70 |
| SDR6603-330M | 33 | ± 20 | 24 | 2.52 | 15 | 0.51 | 0.60 | 0.58 |
| SDR6603-470M | 47 | ± 20 | 15 | 2.52 | 14 | 0.64 | 0.50 | 0.50 |
| SDR6603-680M | 68 | ± 20 | 18 | 2.52 | 11 | 0.86 | 0.40 | 0.40 |
| SDR6603-820M | 82 | ± 20 | 10 | 2.52 | 10 | 1.18 | 0.35 | 0.35 |
| SDR6603-101M | 100 | ± 20 | 29 | 0.796 | 9 | 1.3 | 0.30 | 0.31 |
| SDR6603-151M | 150 | ± 20 | 41 | 0.796 | 6 | 2.0 | 0.25 | 0.27 |
| SDR6603-221M | 220 | ± 15 | 33 | 0.796 | 5.5 | 3.2 | 0.20 | 0.22 |
| SDR6603-331M | 330 | ± 15 | 42 | 0.796 | 5 | 3.8 | 0.16 | 0.18 |
| SDR6603-471M | 470 | ± 15 | 42 | 0.796 | 4 | 5.1 | 0.15 | 0.16 |
| SDR6603-681M | 680 | ± 15 | 58 | 0.796 | 3 | 9.2 | 0.12 | 0.14 |
| SDR6603-821M | 820 | ± 15 | 40 | 0.796 | 2.5 | 12.6 | 0.10 | 0.12 |
| SDR6603-102M | 1000 | ± 15 | 71 | 0.252 | 2 | 13.8 | 0.07 | 0.10 |

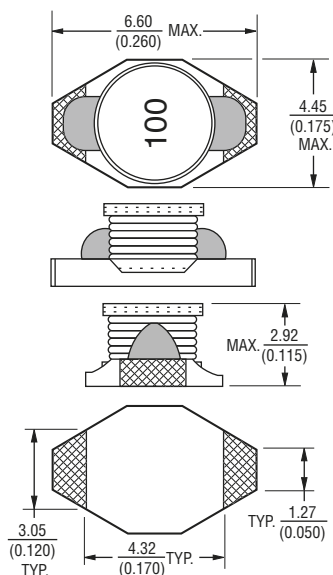
General Specifications

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

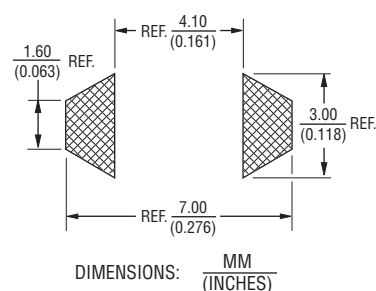
Materials

Core Ferrite
 Wire Enamelled copper
 Base Ceramic
 Adhesive..... Epoxy resin
 Terminal..... Ag/Ni/Au
 Rated Current
 Ind. drop 10 % typ. at Isat
 Temp. Rise ... 15 °C typical at rated I rms
 Packaging..... 600 pcs. per reel

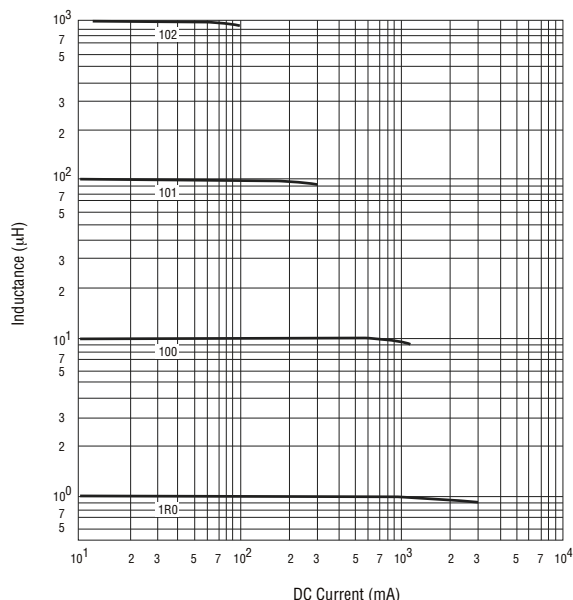
Product Dimensions



Recommended Layout



Inductance vs. Current



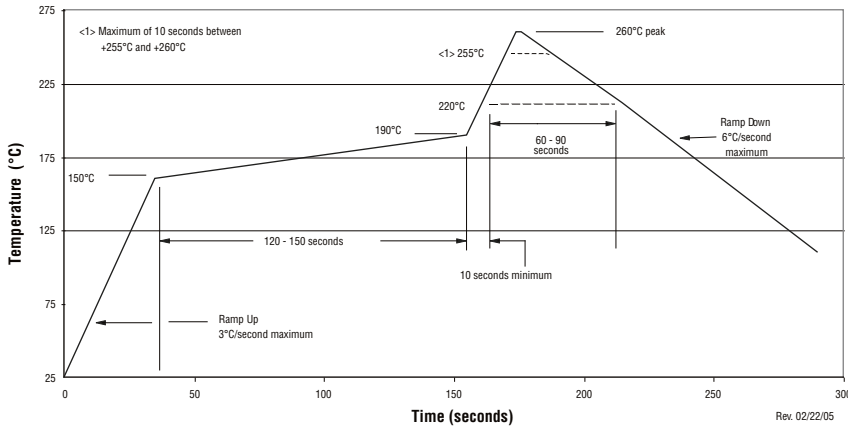
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* 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

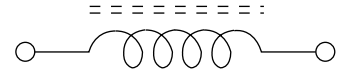
SDR6603 Series - SMD Power Inductors

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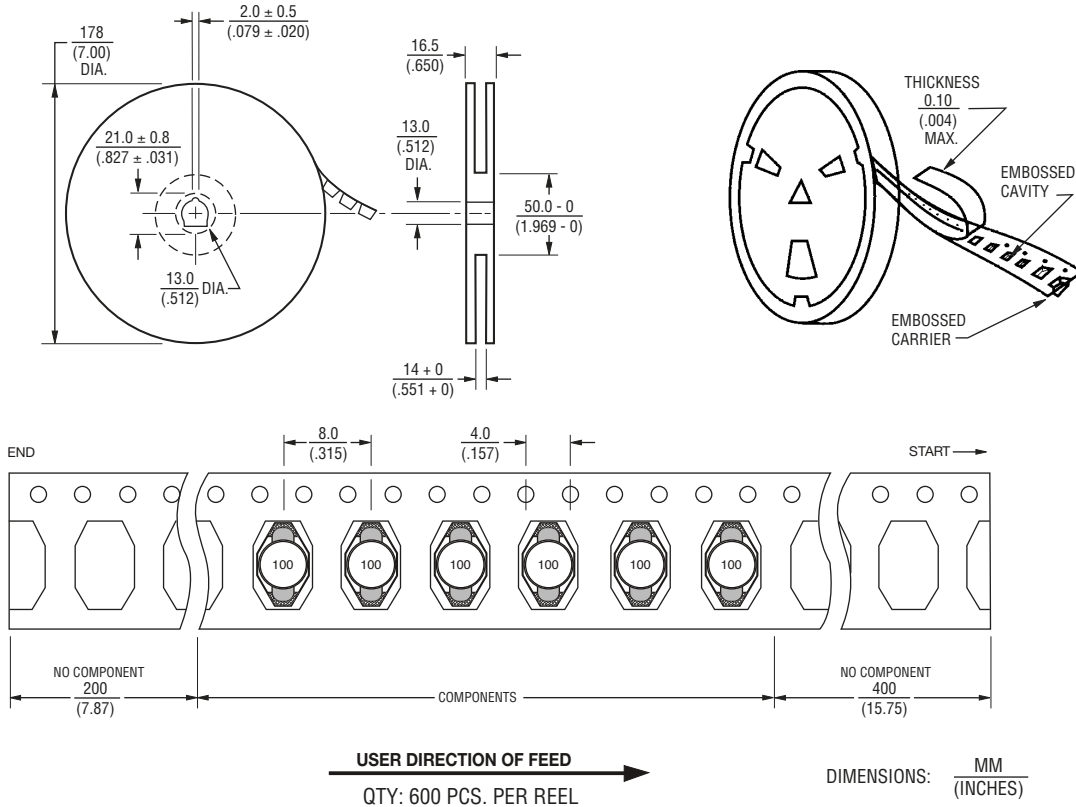
Soldering Profile



Electrical Schematic



Packaging Specifications



REV. 03/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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