



**THE DATASHEET OF
SDR6603-331M**





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

BOURNS®

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)
	(μH)	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

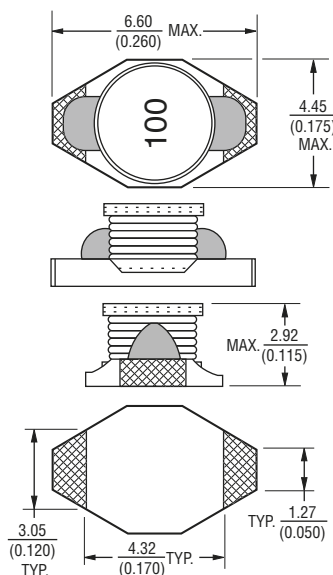
General Specifications

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

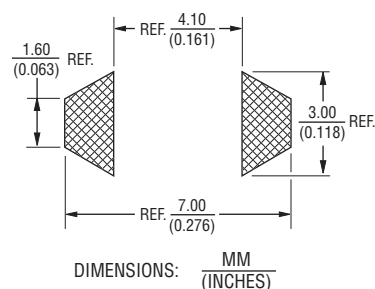
Materials

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

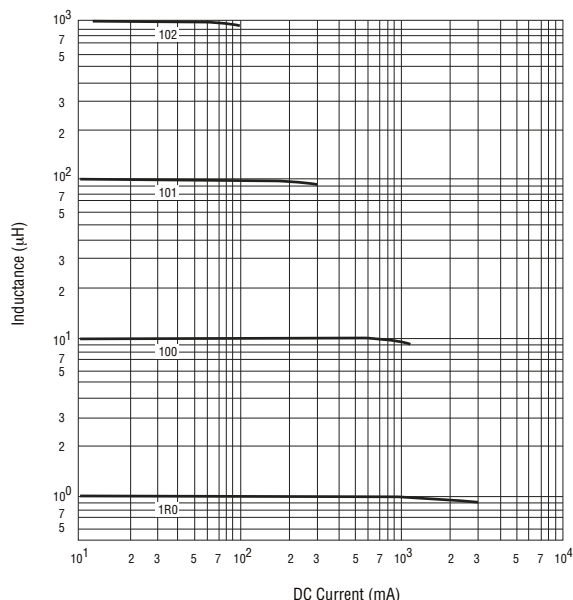
Product Dimensions



Recommended Layout



Inductance vs. Current



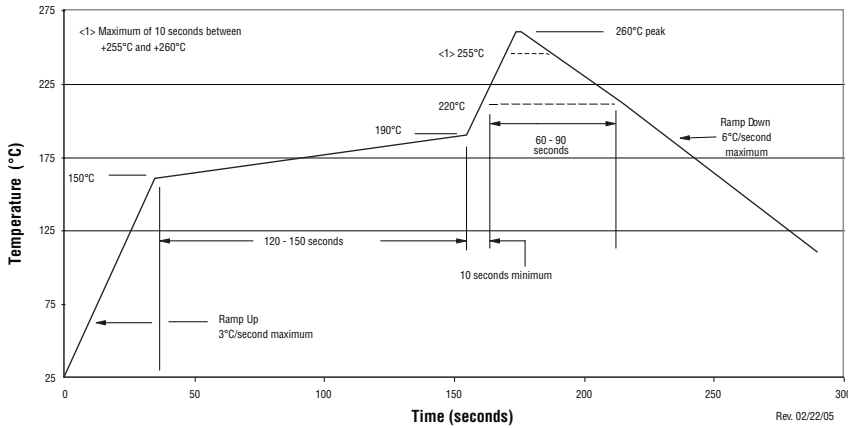
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

*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

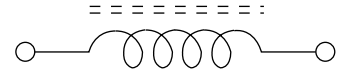
SDR6603 Series - SMD Power Inductors

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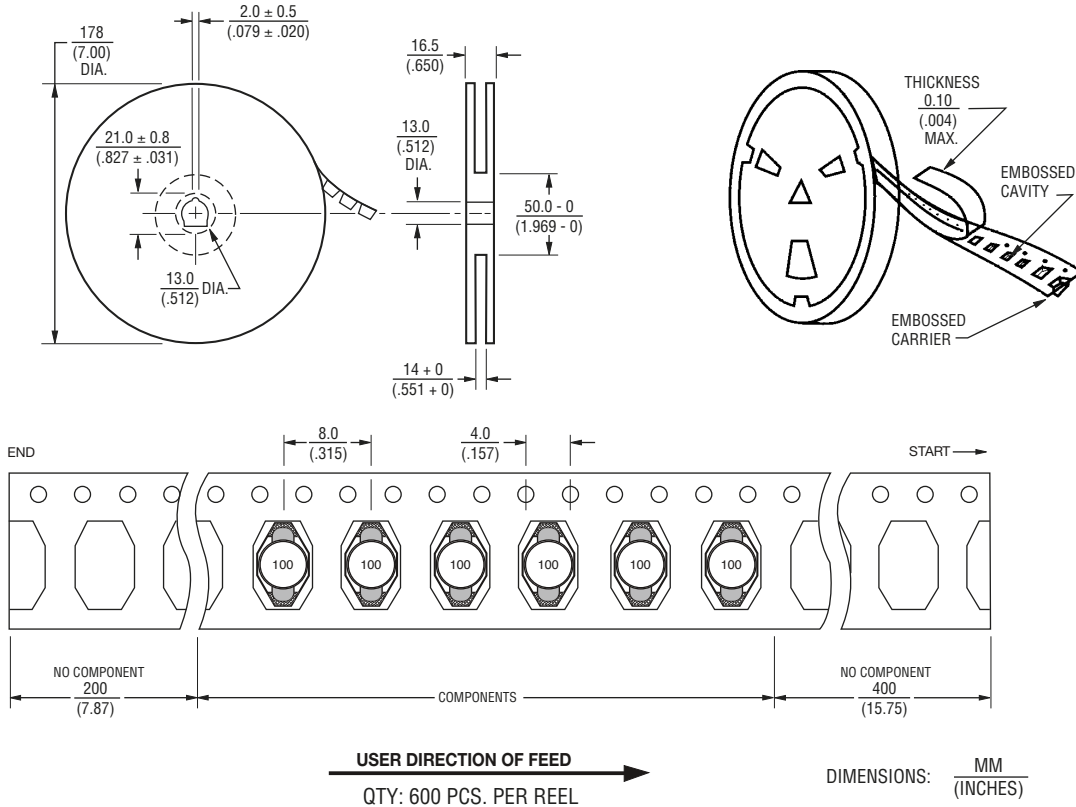
Soldering Profile



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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