



## Features

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

## Applications

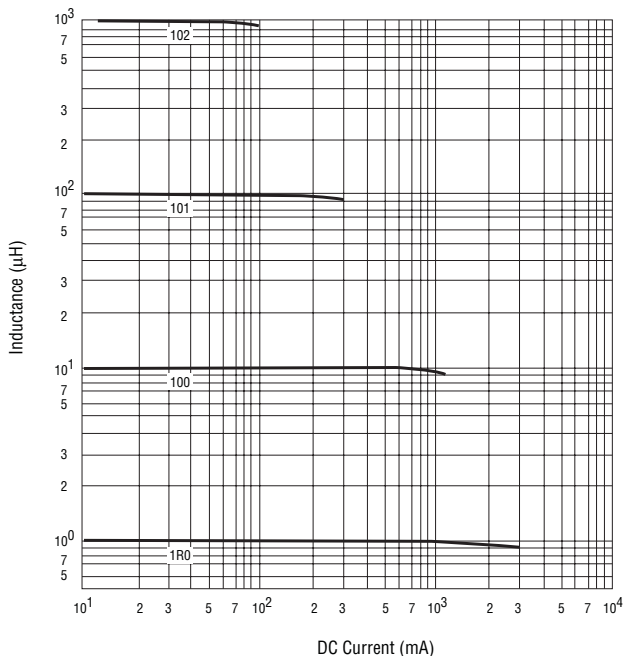
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communications equipment
  - Camcorders
  - LCD TVs
  - Car radios

# SDR6603 Series - SMD Power Inductors

## Electrical Specifications

Bourns Part No.	Inductance 100 kHz		Q Ref.	Test Frequency (MHz)	SRF Typ. (MHz)	DCR 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	±20	33	0.796	5.5	3.2	0.20	0.22
SDR6603-331M	330	±20	42	0.796	5	3.8	0.16	0.18
SDR6603-471M	470	±20	42	0.796	4	5.1	0.15	0.16
SDR6603-681M	680	±20	58	0.796	3	9.2	0.12	0.14
SDR6603-821M	820	±20	40	0.796	2.5	12.6	0.10	0.12
SDR6603-102M	1000	±20	71	0.252	2	13.8	0.07	0.10

## Inductance vs. Current



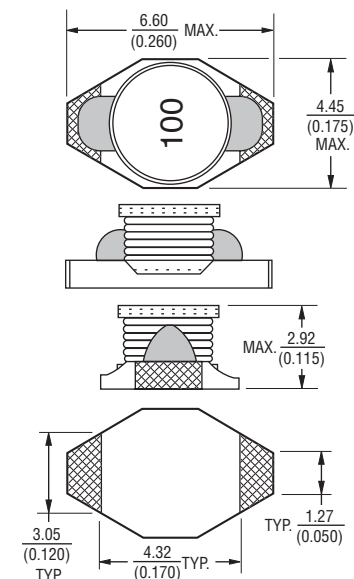
## General Specifications

Test Voltage ..... 0.1 V  
 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 Soldering Heat  
 ..... 260 °C, 10 sec. max.

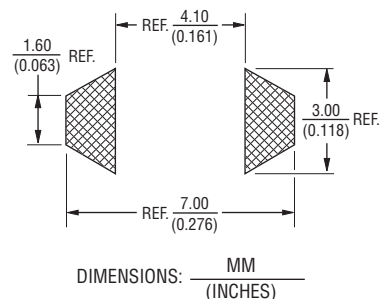
## Materials

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

## Product Dimensions



## Recommended Layout

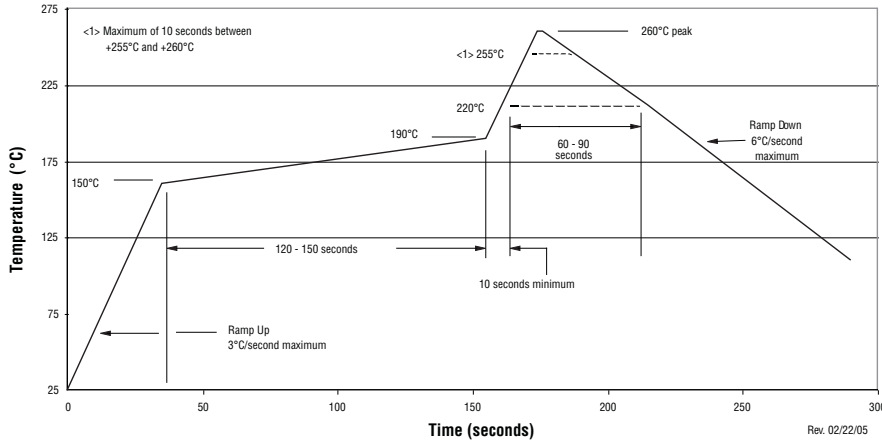


\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

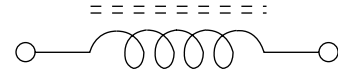
# SDR6603 Series - SMD Power Inductors

**BOURNS®**

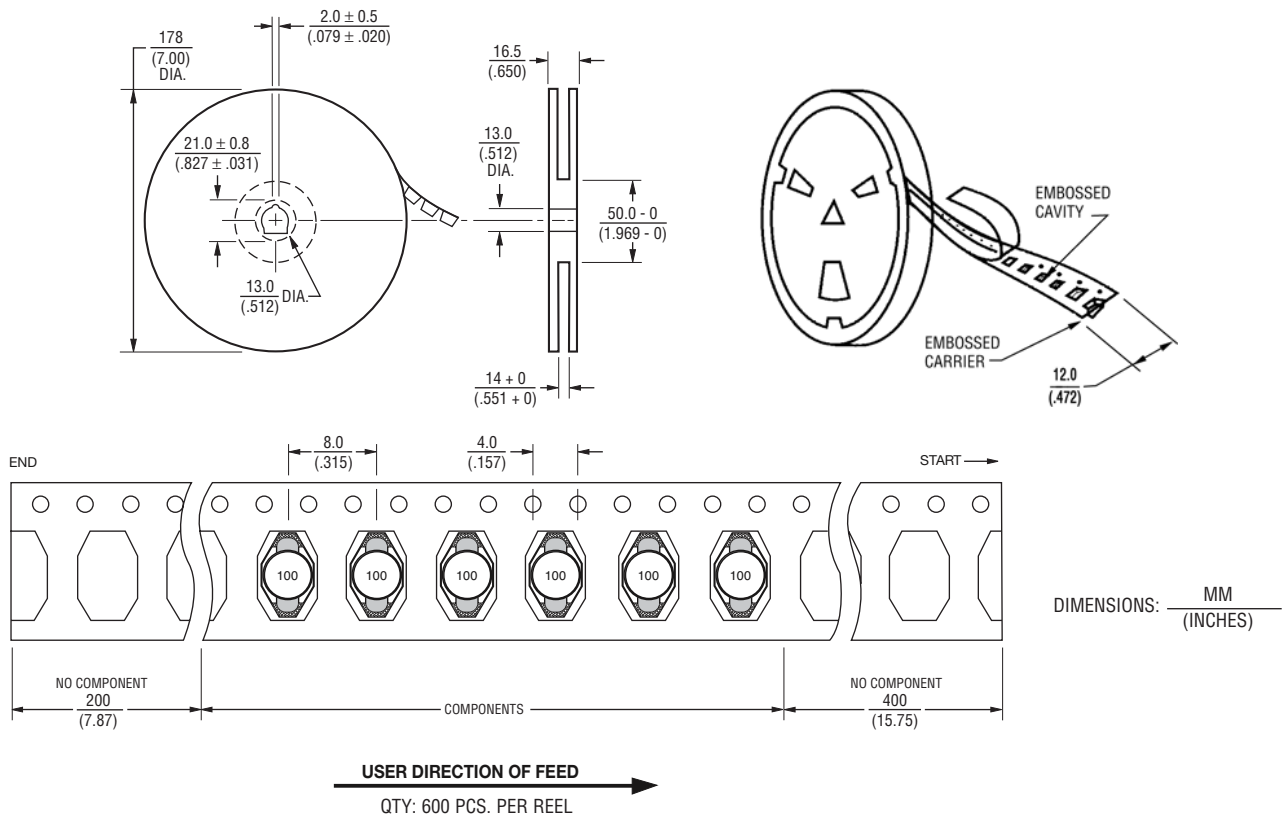
## Soldering Profile



## Electrical Schematic



## Packaging Specifications



REV. 09/09

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