



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





## Features

- Available in E12 series
- Small design of only 5.8 mm maximum diameter
- Low 3.9 mm profile
- RoHS compliant\*

## Applications

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

# SDR0603 Series - SMD Power Inductors

### Electrical Specifications

Bourns Part No.	Inductance 1kHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC Max. (Ω)	I rms Max. (A)	I sat Typ. (A)
	(μH)	Tol. %						
SDR0603-1R5ML	1.5	± 20	24	7.96	85	0.04	3.00	3.50
SDR0603-2R5ML	2.5	± 20	21	7.96	74	0.05	2.35	2.70
SDR0603-3R3ML	3.3	± 20	21	7.96	68	0.05	2.20	2.60
SDR0603-3R9ML	3.9	± 20	22	7.96	62	0.05	2.10	2.20
SDR0603-4R7ML	4.7	± 20	20	7.96	56	0.07	1.80	2.20
SDR0603-5R0ML	5.0	± 20	19	7.96	50	0.07	1.60	2.10
SDR0603-6R8ML	6.8	± 20	19	7.96	44	0.11	1.38	1.80
SDR0603-7R5ML	7.5	± 20	19	7.96	38	0.12	1.29	1.60
SDR0603-100ML	10	± 20	24	2.52	34	0.15	1.14	1.40
SDR0603-120ML	12	± 20	23	2.52	30	0.16	1.02	1.30
SDR0603-150ML	15	± 20	22	2.52	28	0.18	0.93	1.10
SDR0603-180ML	18	± 20	23	2.52	24	0.25	0.82	1.10
SDR0603-220ML	22	± 20	20	2.52	30	0.28	0.75	0.96
SDR0603-270ML	27	± 20	19	2.52	19	0.30	0.67	0.86
SDR0603-330KL	33	± 10	23	2.52	15	0.45	0.61	0.70
SDR0603-390KL	39	± 10	22	2.52	13	0.46	0.56	0.66
SDR0603-470KL	47	± 10	20	2.52	13	0.55	0.52	0.62
SDR0603-560KL	56	± 10	17	2.52	12	0.62	0.48	0.58
SDR0603-680KL	68	± 10	17	2.52	12	0.72	0.44	0.54
SDR0603-820KL	82	± 10	15	2.52	11	0.84	0.40	0.48
SDR0603-101KL	100	± 10	28	0.796	10	0.95	0.38	0.66
SDR0603-121KL	120	± 10	27	0.796	8	1.10	0.36	0.60
SDR0603-151KL	150	± 10	28	0.796	8	1.43	0.32	0.56
SDR0603-181KL	180	± 10	26	0.796	7	1.60	0.30	0.50
SDR0603-221KL	220	± 10	26	0.796	6	2.00	0.26	0.46
SDR0603-271KL	270	± 10	26	0.796	5	2.40	0.24	0.38
SDR0603-331KL	330	± 10	28	0.796	5	3.20	0.20	0.36
SDR0603-391KL	390	± 10	28	0.796	4	3.40	0.18	0.32
SDR0603-471KL	470	± 10	29	0.796	4	4.55	0.15	0.26

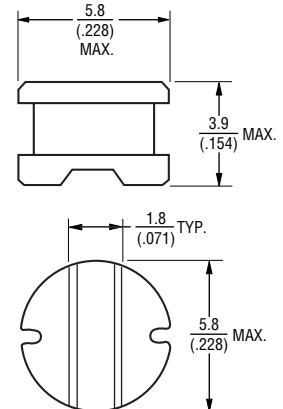
### General Specifications

Test Voltage.....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 for 5 sec.

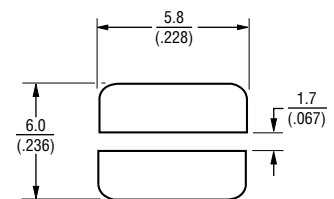
### Materials

Core .....Ferrite DR core  
 Wire .....Enameled copper  
 Terminal.....Ag/Ni/Sn  
 Rated Current..Ind. drop 10 % typ. at Isat  
 Temperature Rise .....40 °C max.  
 at rated Irms  
 Packaging.....400 pcs. per reel

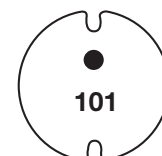
### Product Dimensions



### Recommended Layout



### Typical Part Marking



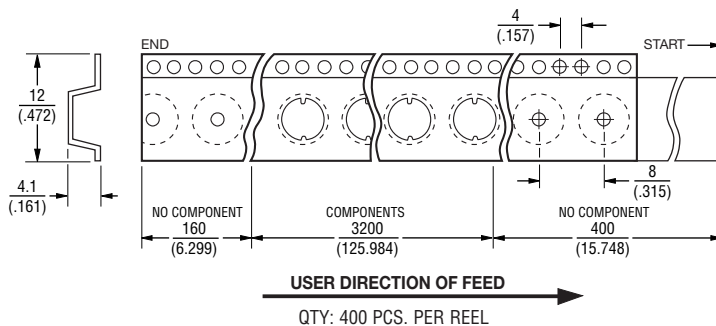
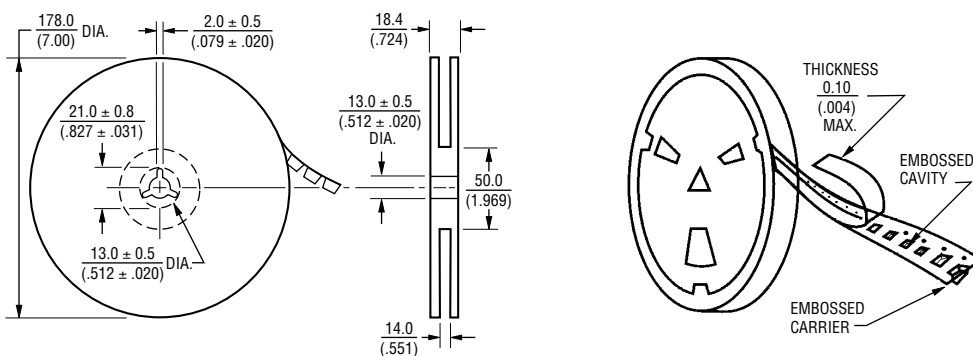
\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

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

# SDR0603 Series - SMD Power Inductors

**BOURNS®**

## Packaging Specifications



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