



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 communications equipment
 - Camcorders
 - LCD TVs

BOURNS®

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

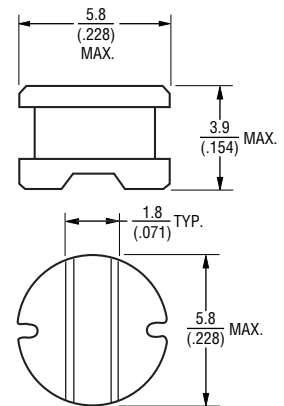
General Specifications

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.
 Moisture Sensitivity Level 1
 ESD Classification (HBM)..... N/A

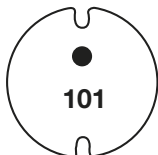
Materials

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

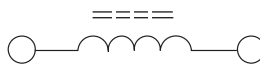
Product Dimensions



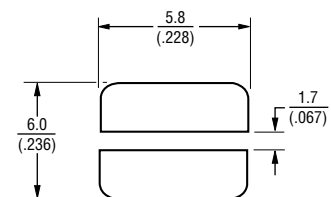
Typical Part Marking



Electrical Schematic



Recommended Layout



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



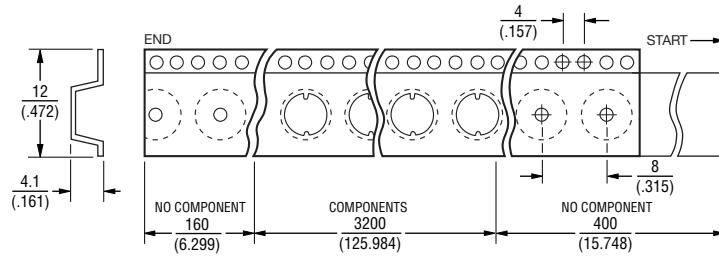
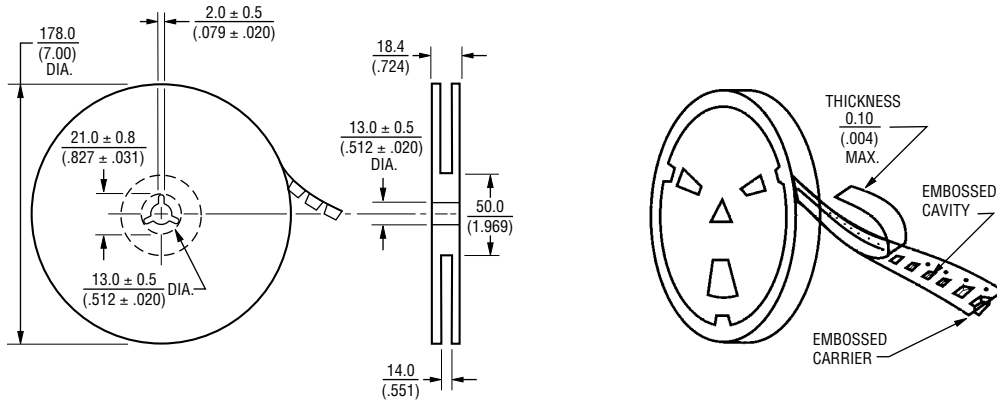
WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*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.

SDR0603 Series - SMD Power Inductors

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Packaging Specifications



USER DIRECTION OF FEED →
QTY: 400 PCS. PER REEL

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

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REV. 03/18

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Users should verify actual device performance in their specific applications.

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