



Features

- Available in E12 series
- Small design of only 5.8 mm maximum diameter
- Low 3.9 mm profile
- Lead free version available (see How to Order)
- Lead free versions are 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 (Ω)	I rms Max. (A)	I sat Typ. (A)
	(μ H)	Tol. %						
SDR0603-1R5M	1.5	± 20	24	7.96	85	0.04	3.00	3.50
SDR0603-2R5M	2.5	± 20	21	7.96	74	0.05	2.35	2.70
SDR0603-3R3M	3.3	± 20	21	7.96	68	0.05	2.20	2.60
SDR0603-3R9M	3.9	± 20	22	7.96	62	0.05	2.10	2.20
SDR0603-4R7M	4.7	± 20	20	7.96	56	0.07	1.80	2.20
SDR0603-5R0M	5.0	± 20	19	7.96	50	0.07	1.60	2.10
SDR0603-6R8M	6.8	± 20	19	7.96	44	0.11	1.38	1.80
SDR0603-7R5M	7.5	± 20	19	7.96	38	0.12	1.29	1.60
SDR0603-100M	10	± 20	24	2.52	34	0.15	1.14	1.40
SDR0603-120M	12	± 20	23	2.52	30	0.16	1.02	1.30
SDR0603-150M	15	± 20	22	2.52	28	0.18	0.93	1.10
SDR0603-180M	18	± 20	23	2.52	24	0.25	0.82	1.10
SDR0603-220M	22	± 20	20	2.52	30	0.28	0.75	0.96
SDR0603-270M	27	± 20	19	2.52	19	0.30	0.67	0.86
SDR0603-330K	33	± 10	23	2.52	15	0.45	0.61	0.70
SDR0603-390K	39	± 10	22	2.52	13	0.46	0.56	0.66
SDR0603-470K	47	± 10	20	2.52	13	0.55	0.52	0.62
SDR0603-560K	56	± 10	17	2.52	12	0.62	0.48	0.58
SDR0603-680K	68	± 10	17	2.52	12	0.72	0.44	0.54
SDR0603-820K	82	± 10	15	2.52	11	0.84	0.40	0.48
SDR0603-101K	100	± 10	28	0.796	10	0.95	0.38	0.66
SDR0603-121K	120	± 10	27	0.796	8	1.10	0.36	0.60
SDR0603-151K	150	± 10	28	0.796	8	1.43	0.32	0.56
SDR0603-181K	180	± 10	26	0.796	7	1.60	0.30	0.50
SDR0603-221K	220	± 10	26	0.796	6	2.00	0.26	0.46
SDR0603-271K	270	± 10	26	0.796	5	2.40	0.24	0.38
SDR0603-331K	330	± 10	28	0.796	5	3.20	0.20	0.36
SDR0603-391K	390	± 10	28	0.796	4	3.40	0.18	0.32
SDR0603-471K	470	± 10	29	0.796	4	4.55	0.15	0.26

How to Order

SDR0603 - 100M

Model _____
 Value/Tolerance: from table _____
 Termination _____
 L = Ag/Ni/Sn
 Blank = Ag/Ni/SnPb

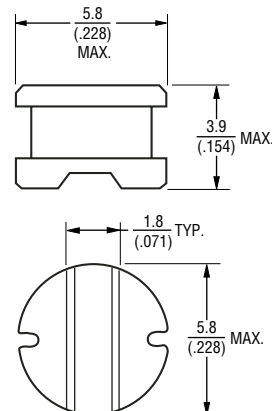
General Specifications

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.

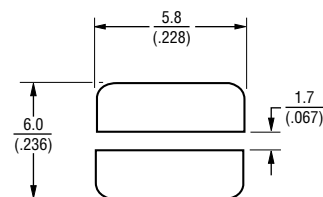
Materials

Core Ferrite DR core
 Wire Enameled copper
 Terminal Electrode See How to Order
 Rated Current... Ind. drop 10 % typ. at I_{sat}
 Temperature Rise 40 °C max.
 at rated I_{rms}
 Packaging 400 pcs. per reel

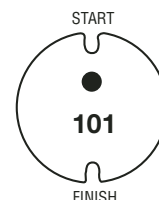
Product Dimensions



Recommended Layout



Typical Part Marking

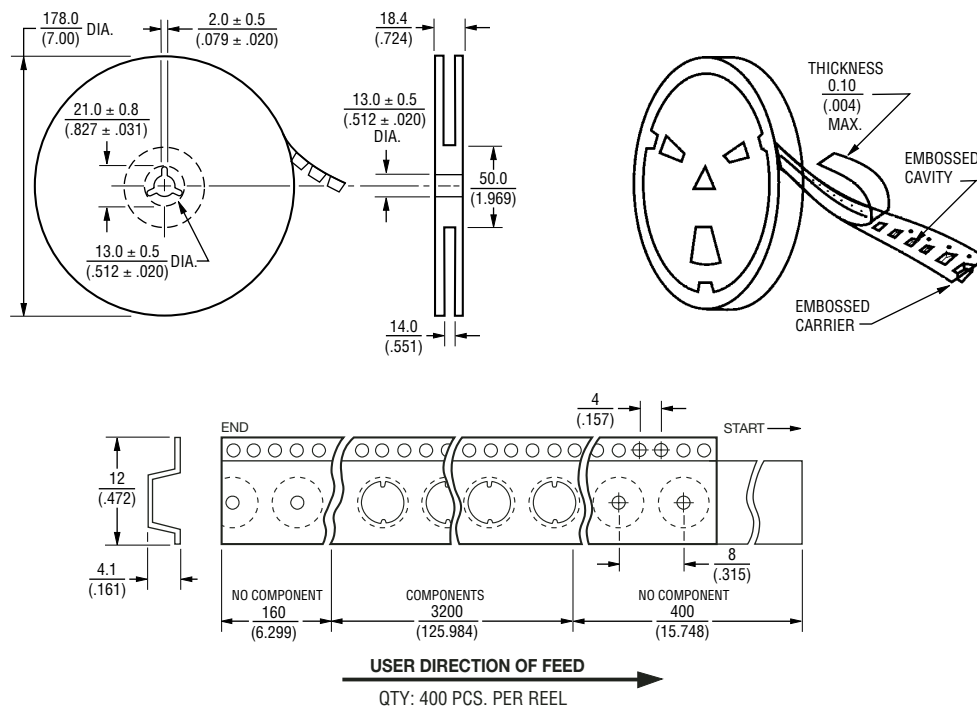


DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

SDR0603 Series - SMD Power Inductors

BOURNS®

Packaging Specifications



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