

Features

- Available in E12 series
- Low height of only 2.7 mm
- High Isat of 3.2 amps
- RoHS compliant*

Applications

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

SDR0703 Series - SMD Power Inductors

Electrical Specifications

Bourns Part Number	Inductance 100 kHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC Max. (Ω)	I rms Max. (A)	I sat Typ. (A)
	(μH)	Tol. %						
SDR0703-1R0ML	1.0	± 20	25	7.96	160.0	0.042	2.20	3.20
SDR0703-1R2ML	1.2	± 20	25	7.96	145.0	0.047	2.00	3.00
SDR0703-1R8ML	1.8	± 20	25	7.96	105.0	0.052	1.90	2.70
SDR0703-2R2ML	2.2	± 20	24	7.96	95.0	0.060	1.80	2.60
SDR0703-2R7ML	2.7	± 20	23	7.96	80.0	0.065	1.70	2.50
SDR0703-3R3ML	3.3	± 20	23	7.96	65.0	0.075	1.65	2.35
SDR0703-3R9ML	3.9	± 20	22	7.96	70.0	0.080	1.58	2.25
SDR0703-4R7ML	4.7	± 20	20	7.96	60.0	0.100	1.50	2.10
SDR0703-5R6ML	5.6	± 20	20	7.96	56.0	0.105	1.40	2.00
SDR0703-6R8ML	6.8	± 20	20	7.96	45.0	0.115	1.30	1.90
SDR0703-8R2ML	8.2	± 20	20	7.96	40.0	0.150	1.10	1.50
SDR0703-100KL	10	± 10	23	2.52	36.0	0.170	1.00	1.40
SDR0703-120KL	12	± 10	20	2.52	36.0	0.180	0.90	1.30
SDR0703-150KL	15	± 10	23	2.52	30.0	0.240	0.75	1.12
SDR0703-180KL	18	± 10	20	2.52	30.0	0.280	0.70	1.05
SDR0703-220KL	22	± 10	20	2.52	26.0	0.300	0.65	0.95
SDR0703-270KL	27	± 10	20	2.52	20.0	0.400	0.60	0.88
SDR0703-330KL	33	± 10	17	2.52	20.0	0.450	0.56	0.82
SDR0703-390KL	39	± 10	18	2.52	18.0	0.550	0.50	0.73
SDR0703-470KL	47	± 10	20	2.52	15.0	0.720	0.40	0.64
SDR0703-560KL	56	± 10	20	2.52	13.0	0.800	0.39	0.60
SDR0703-680KL	68	± 10	18	2.52	13.0	0.900	0.38	0.56
SDR0703-820KL	82	± 10	18	2.52	12.0	1.18	0.33	0.47
SDR0703-101KL	100	± 10	33	0.796	11.0	1.56	0.27	0.40
SDR0703-121KL	120	± 10	32	0.796	10.0	1.75	0.26	0.37
SDR0703-151KL	150	± 10	30	0.796	9.0	2.00	0.25	0.34
SDR0703-181KL	180	± 10	33	0.796	7.0	2.70	0.19	0.30
SDR0703-221KL	220	± 10	31	0.796	7.0	3.00	0.18	0.28
SDR0703-271KL	270	± 10	30	0.796	7.0	3.60	0.17	0.22
SDR0703-331KL	330	± 10	33	0.796	6.0	4.80	0.16	0.19
SDR0703-391KL	390	± 10	36	0.796	5.5	6.20	0.14	0.18
SDR0703-471KL	470	± 10	33	0.796	5.0	7.00	0.13	0.16
SDR0703-561KL	560	± 10	36	0.796	4.2	9.20	0.11	0.15
SDR0703-681KL	680	± 10	32	0.796	4.0	10.50	0.10	0.15
SDR0703-821KL	820	± 10	32	0.796	3.6	12.00	0.09	0.14
SDR0703-102KL	1000	± 10	30	0.252	3.2	14.20	0.08	0.13

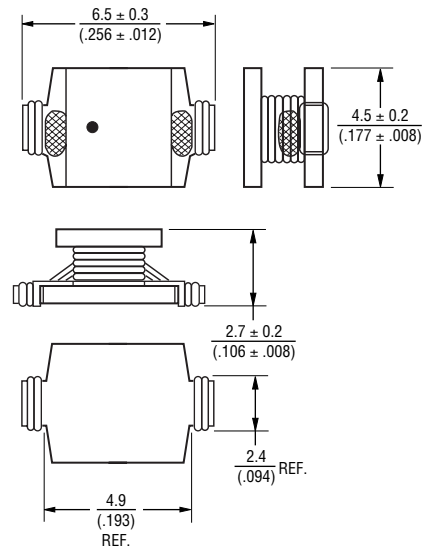
General Specifications

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 for 5 sec..
 Moisture Sensitivity Level 1
 ESD Classification (HBM)..... N/A

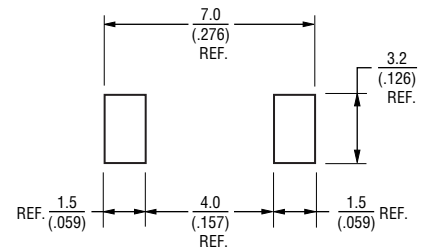
Materials

Core Ferrite
 Wire Enameled copper 130 °C
 Adhesive 6020H-6
 Terminal Sn/Ag/Cu
 Rated Current.. Ind. drop 10 % typ. at Isat
 Temp. Rise..... 20 °C max. at rated I rms
 Packaging 500 pcs. per reel

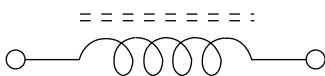
Product Dimensions



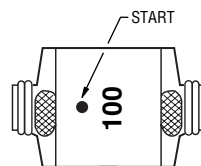
Recommended Layout



Electrical Schematic



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.

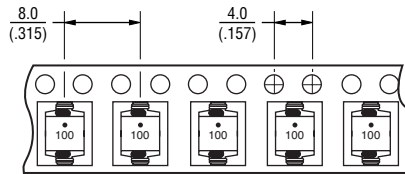
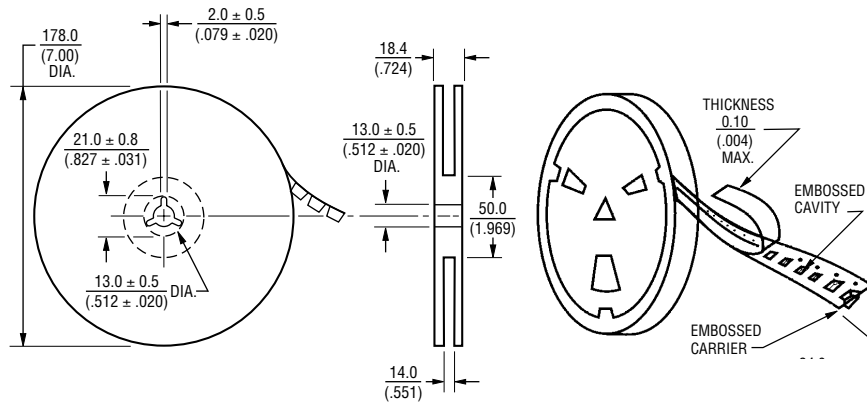
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

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

SDR0703 Series - SMD Power Inductors

BOURNS®

Packaging Specifications



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

QTY: 500 PCS. PER REEL

REV. 03/18

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.