

### 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
  - Car radios

## 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

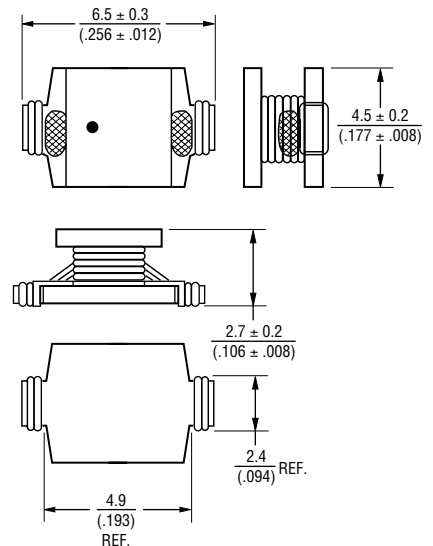
### General Specifications

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)..... B0E

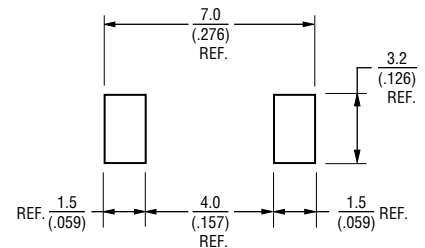
### Materials

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 Irms  
 Packaging ..... 500 pcs. per reel

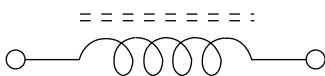
### Product Dimensions



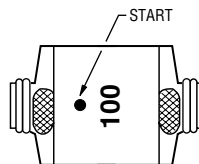
### Recommended Layout



### 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.

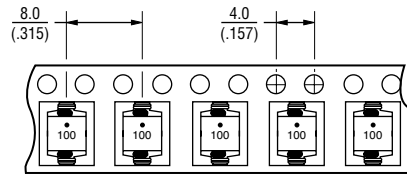
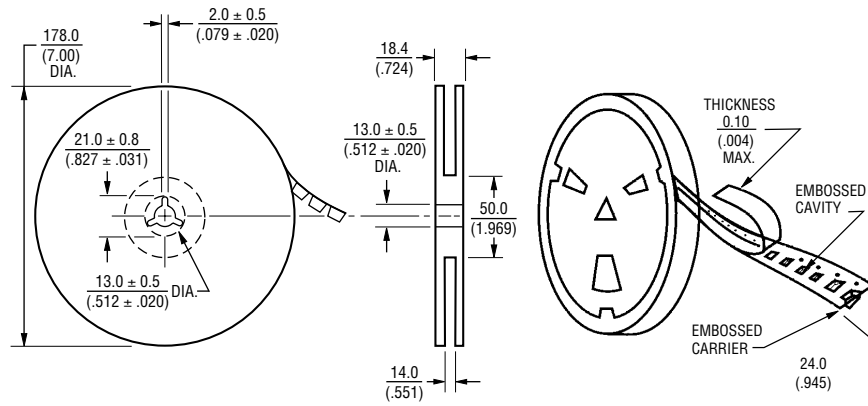
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

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. 08/17

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Users should verify actual device performance in their specific applications.