

Features

- Available in E6 values
- Current rating to 4.8 amps
- Mounting height 4.8 mm maximum
- RoHS compliant*

Applications

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

SDR1045 Series - SMD Power Inductors

Electrical Specifications

Bourns Part Number	Inductance 100 kHz		Q Typ.	Test Frequency (MHz)	SRF Min. (MHz)	RDC Max. (Ω)	I rms Max. (A)	I sat Typ. (A)
	(μ H)	Tol. %						
SDR1045-2R7M	2.7	± 20	25	7.96	68.7	0.026	4.80	6.20
SDR1045-4R5M	4.5	± 20	25	7.96	44.2	0.033	4.20	5.20
SDR1045-6R8M	6.8	± 20	22	7.96	35.8	0.040	3.50	4.20
SDR1045-100M	10.0	± 20	26	2.52	27.8	0.064	3.20	3.60
SDR1045-150M	15.0	± 20	26	2.52	23.7	0.100	2.50	3.00
SDR1045-220M	22.0	± 20	22	2.52	19.4	0.145	2.20	2.60
SDR1045-330M	33.0	± 20	20	2.52	15.8	0.220	1.90	2.10
SDR1045-470M	47.0	± 20	21	2.52	13.6	0.270	1.60	1.85
SDR1045-680M	68.0	± 20	21	2.52	11.1	0.360	1.30	1.50
SDR1045-101K	100.0	± 10	14	0.796	9.7	0.540	1.10	1.30
SDR1045-151K	150.0	± 10	16	0.796	7.1	0.700	0.85	1.05
SDR1045-221K	220.0	± 10	15	0.796	6.4	1.150	0.72	0.85
SDR1045-331K	330.0	± 10	12	0.796	4.6	1.700	0.62	0.70
SDR1045-471K	470.0	± 10	12	0.796	4.2	2.250	0.52	0.58
SDR1045-681K	680.0	± 10	13	0.796	3.6	3.300	0.43	0.46
SDR1045-102K	1000.0	± 10	25	0.252	2.9	4.700	0.38	0.40

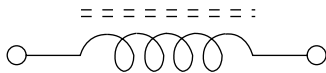
General Specifications

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

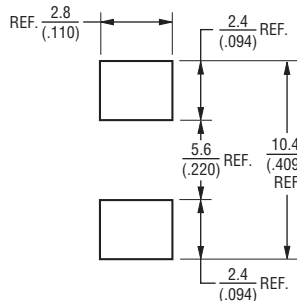
Materials

Core Ferrite DR
 Wire Enamelled copper wire 130
 Terminal Cu/Sn
 Rated Current Ind. drop 10 % typ. at Isat
 Temperature Rise 40 °C max. at rated I rms
 Packaging 700 pcs. per reel

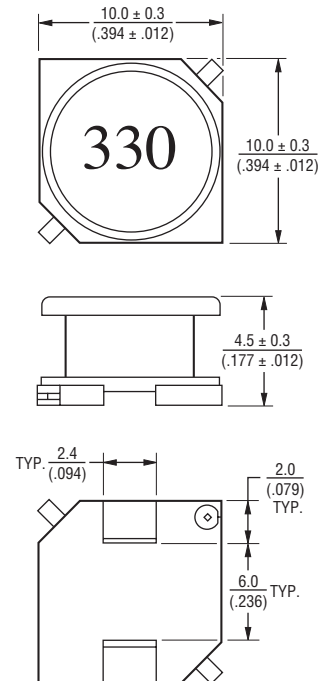
Electrical Schematic



Recommended Layout



Product Dimensions



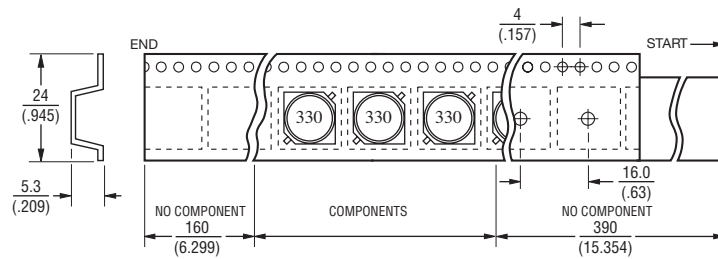
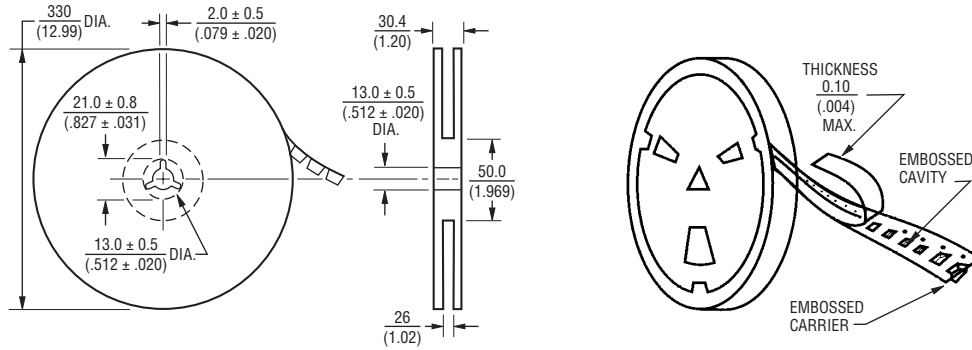
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

*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.

SDR1045 Series - SMD Power Inductors

BOURNS®

Packaging Specifications



USER DIRECTION OF FEED
 QTY: 700 PCS. PER REEL

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

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.