

## Features

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

## Applications

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

# SDR1045 Series - SMD Power Inductors

## Electrical Specifications

Bourns Part No.	Inductance 100 kHz		Q Typ.	Test Frequency (MHz)	SRF Min. (MHz)	RDC Max. (Ω)	I rms Max. (A)	I sat Typ. (A)
	(μH)	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

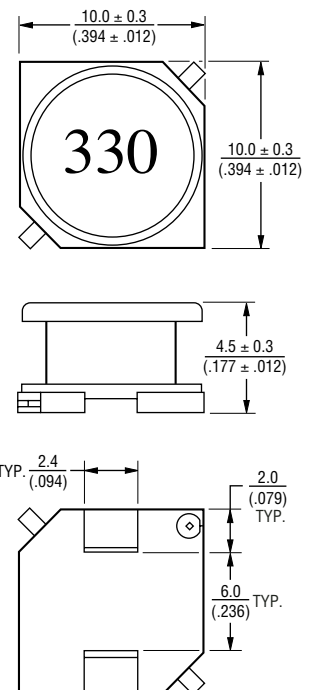
## General Specifications

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.

## Materials

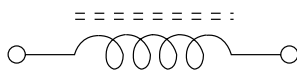
Core .....Ferrite DR  
 Wire .....Enamelled copper wire 130  
 Terminal.....Cu/Ni/Sn  
 Rated Current .....Ind. drop 10 % typ. at Isat  
 Temperature Rise .....40 °C max.  
 at rated I rms  
 Packaging .....700 pcs. per reel

## Product Dimensions

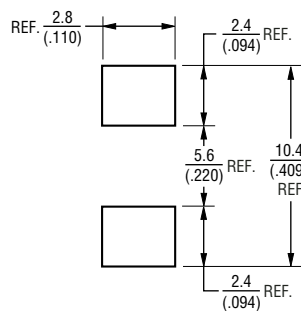


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

## Electrical Schematic



## Recommended Layout

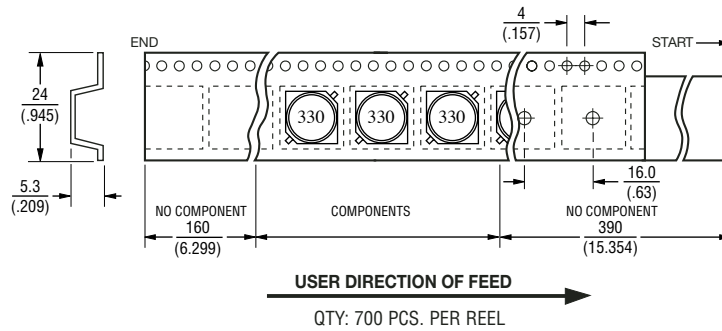
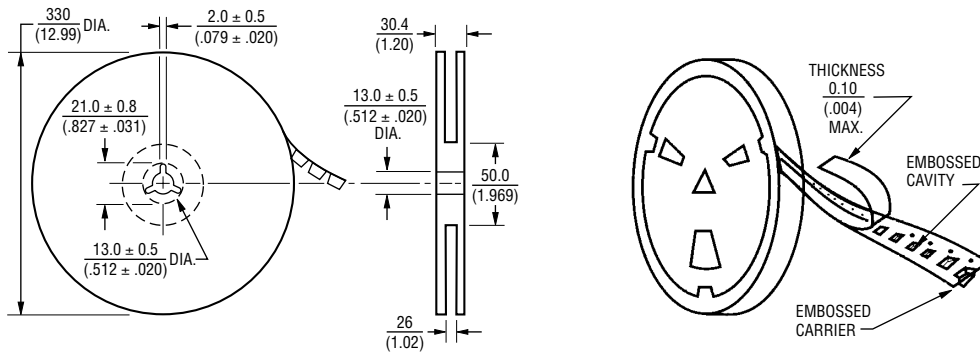


\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

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**BOURNS®**

## Packaging Specifications



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

REV. 05/06

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