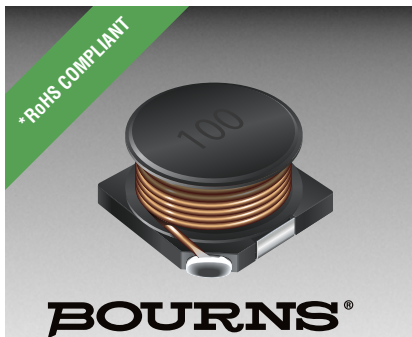




**THE DATASHEET OF  
SDR7045-680K**





## Features

- Available in E6 values
- Current rating to 3.8 amps
- RoHS compliant\*

## Applications

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

# SDR7045 Series - SMD Power Inductors

### Electrical Specifications

Bourns Part Number	Inductance 100 kHz		Q Typ.	Test Frequency (MHz)	SRF Min. (MHz)	RDC Max. ( $\Omega$ )	I rms Max. (A)	I sat Typ. (A)
	( $\mu$ H)	Tol. %						
SDR7045-1R2M	1.2	$\pm 20$	25	7.96	90	0.022	3.80	5.00
SDR7045-1R5M	1.5	$\pm 20$	26	7.96	109	0.027	3.50	4.50
SDR7045-2R2M	2.2	$\pm 20$	24	7.96	79	0.032	3.30	4.00
SDR7045-3R3M	3.3	$\pm 20$	23	7.96	47	0.036	2.80	3.70
SDR7045-4R7M	4.7	$\pm 20$	23	7.96	38	0.042	2.60	3.40
SDR7045-6R8M	6.8	$\pm 20$	22	7.96	35	0.054	2.25	2.70
SDR7045-100M	10.0	$\pm 20$	28	2.52	23	0.070	2.00	2.30
SDR7045-150M	15.0	$\pm 20$	24	2.52	19	0.086	1.60	1.90
SDR7045-220M	22.0	$\pm 20$	26	2.52	18	0.125	1.40	1.62
SDR7045-330M	33.0	$\pm 20$	20	2.52	18	0.150	1.22	1.32
SDR7045-470K	47.0	$\pm 10$	21	2.52	11	0.230	1.00	1.10
SDR7045-680K	68.0	$\pm 10$	17	2.52	11	0.280	0.90	0.92
SDR7045-101K	100.0	$\pm 10$	17	0.796	10	0.430	0.75	0.72
SDR7045-151K	150.0	$\pm 10$	17	0.796	8	0.580	0.62	0.58
SDR7045-221K	220.0	$\pm 10$	22	0.796	6	0.930	0.50	0.48
SDR7045-331K	330.0	$\pm 10$	20	0.796	6	1.240	0.42	0.40
SDR7045-471K	470.0	$\pm 10$	20	0.796	4	1.850	0.34	0.30
SDR7045-681K	680.0	$\pm 10$	18	0.796	4	2.400	0.30	0.26
SDR7045-102K	1000.0	$\pm 10$	48	0.252	3	4.000	0.22	0.20

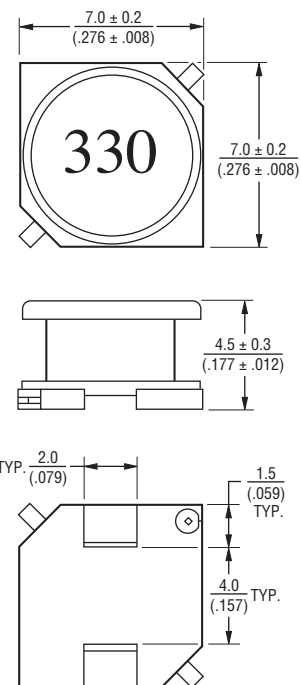
### General Specifications

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

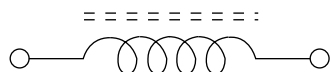
Core ..... Ferrite DR  
 Wire ..... Enamelled copper wire 130  
 Terminal..... Cu/Sn  
 Rated Current  
 ..... Ind. drop 10 % typ. at Isat  
 Temperature Rise  
 ..... 40 °C max. at rated I rms  
 Packaging..... 1000 pcs. per reel

### Product Dimensions

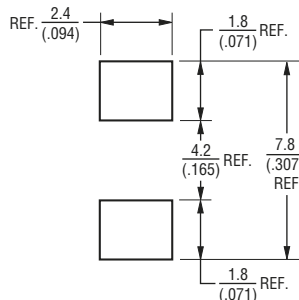


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

### Electrical Schematic



### Recommended Layout



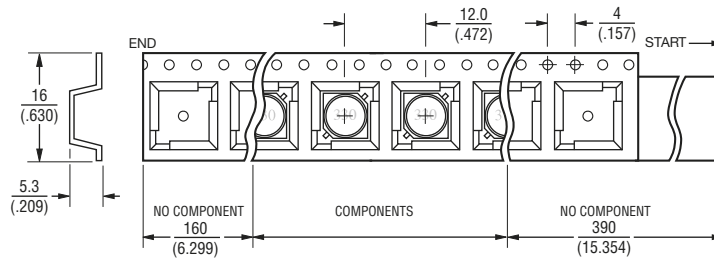
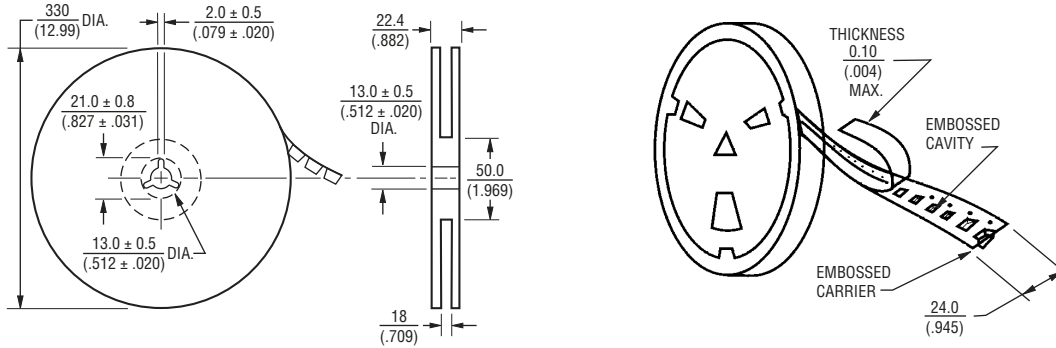
**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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# SDR705 Series - SMD Power Inductors

**BOURNS®**

## Packaging Specifications



USER DIRECTION OF FEED →

QTY: 1000 PCS. PER REEL

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

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