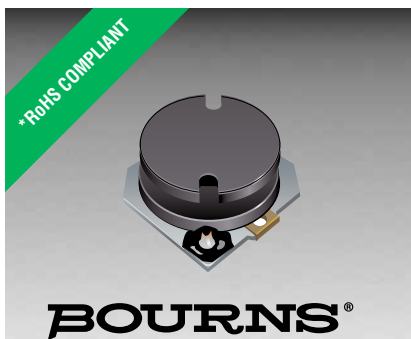




## Features

- Available in E6 series
- Low height of only 4.8 mm
- High I rms of 4.0 amps
- RoHS compliant\*

## Applications

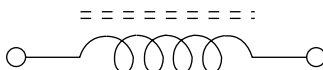
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communications equipment
  - Camcorders
  - LCD TVs
  - Car radios

# SDR1105 Series - SMD Power Inductors

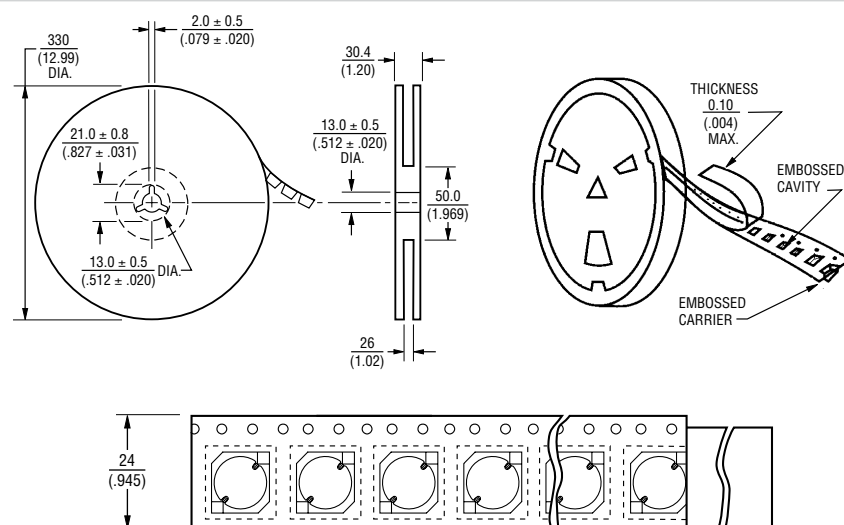
## Electrical Specifications

| Bourns<br>Part Number | Inductance<br>1 kHz |          | RDC<br>Max.<br>( $\Omega$ ) | I rms<br>Max.<br>(A) | I sat<br>Typ.<br>(A) |
|-----------------------|---------------------|----------|-----------------------------|----------------------|----------------------|
|                       | ( $\mu$ H)          | Tol. %   |                             |                      |                      |
| SDR1105-100ML         | 10                  | $\pm 20$ | 0.045                       | 4.00                 | 8.0                  |
| SDR1105-120ML         | 12                  | $\pm 20$ | 0.048                       | 3.80                 | 8.0                  |
| SDR1105-150ML         | 15                  | $\pm 20$ | 0.052                       | 3.50                 | 8.0                  |
| SDR1105-180ML         | 18                  | $\pm 20$ | 0.070                       | 3.30                 | 7.0                  |
| SDR1105-220ML         | 22                  | $\pm 20$ | 0.080                       | 3.00                 | 6.5                  |
| SDR1105-270ML         | 27                  | $\pm 20$ | 0.090                       | 2.80                 | 5.0                  |
| SDR1105-330KL         | 33                  | $\pm 10$ | 0.100                       | 2.60                 | 5.0                  |
| SDR1105-390KL         | 39                  | $\pm 10$ | 0.140                       | 2.40                 | 4.5                  |
| SDR1105-470KL         | 47                  | $\pm 10$ | 0.170                       | 2.20                 | 4.0                  |
| SDR1105-560KL         | 56                  | $\pm 10$ | 0.200                       | 2.00                 | 3.5                  |
| SDR1105-680KL         | 68                  | $\pm 10$ | 0.210                       | 1.80                 | 3.5                  |
| SDR1105-820KL         | 82                  | $\pm 10$ | 0.300                       | 1.60                 | 3.0                  |
| SDR1105-101KL         | 100                 | $\pm 10$ | 0.320                       | 1.50                 | 2.8                  |
| SDR1105-151KL         | 150                 | $\pm 10$ | 0.500                       | 1.20                 | 2.3                  |
| SDR1105-201KL         | 200                 | $\pm 10$ | 0.650                       | 1.00                 | 1.8                  |

## Electrical Schematic



## Packaging Specifications



QTY: 800 PCS. PER REEL

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

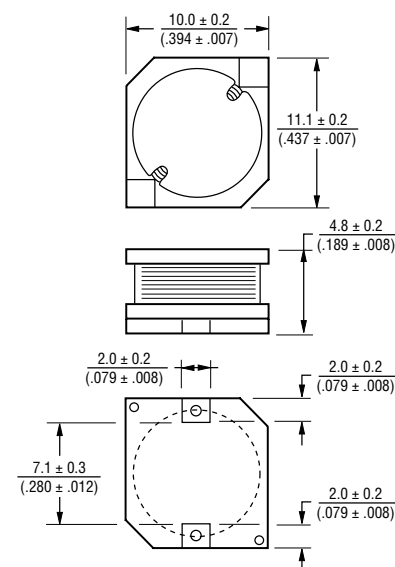
## General Specifications

Test Frequency ..... 1 KHz  
 Test Voltage ..... 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.

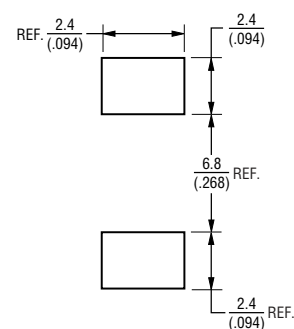
## Materials

Core ..... Ferrite DR  
 Wire ..... Enameled copper  
 Base ..... FR-4  
 Terminal ..... Cu/Ni/Au  
 Rated Current  
 ..... Ind. drop 10 % typ. at I sat  
 Temperature Rise  
 ..... 40 °C max. at rated I rms  
 Packaging ..... 800 pcs. per reel

## Product Dimensions



## Recommended Layout



REV. 08/16

\*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.