

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
 - 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 |

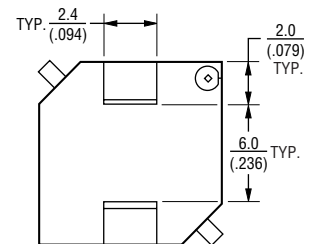
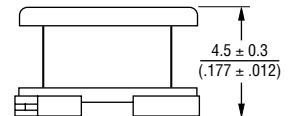
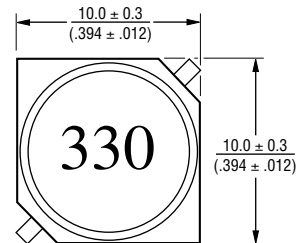
General Specifications

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

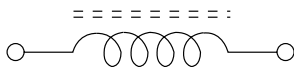
CoreFerrite DR
 WireEnamelled copper wire 130
 TerminalCu/Sn
 Rated Current
Ind. drop 10 % typ. at Isat
 Temperature Rise40 °C max.
 at rated Irms
 Packaging700 pcs. per reel

Product Dimensions

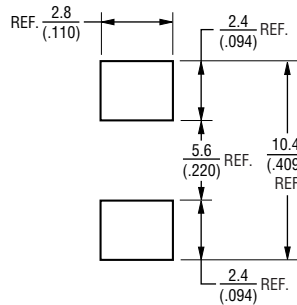


DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

Electrical Schematic



Recommended Layout

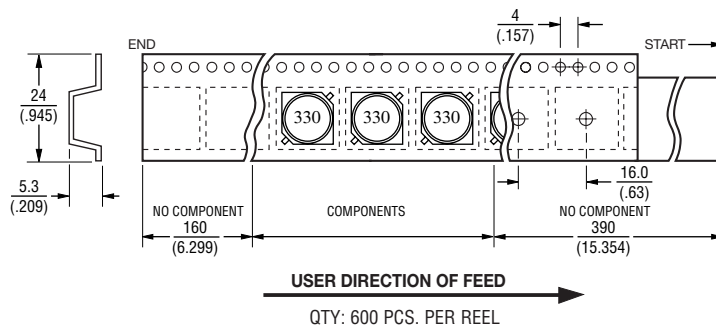
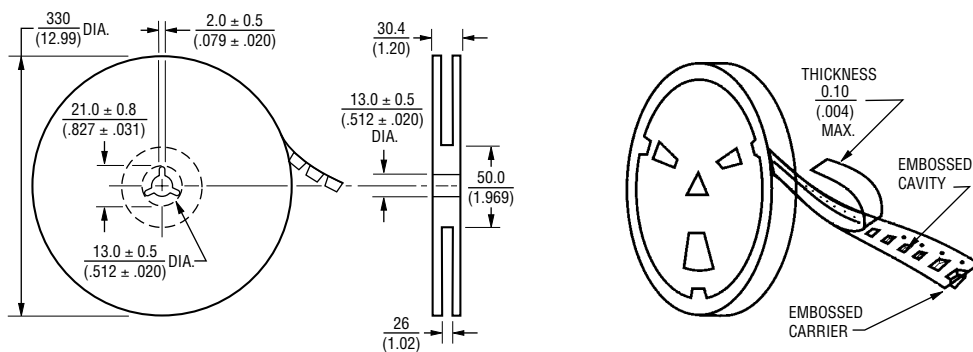


*RoHS Directive 2002/95/EC Jan 27, 2003 including Annex.
 Specifications are subject to change without notice.
 Customers should verify actual device performance in their specific applications.

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BOURNS®

Packaging Specifications



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