



Features

- Available in E12 series
- Unit height of 2.2 mm
- Current up to 1.5 A
- High Q level
- RoHS compliant*



The SDR0602 Series is currently available, although not recommended for new designs.

SDR0602 Series - SMD High Power Inductor

Electrical Specifications

| Bourns Part No. | Inductance 1kHz | | Q Ref. | Test Frequency (MHz) | SRF Min. (MHz) | RDC Max. (Ω) | I rms Max. (A) | I sat Typ. (A) |
|-----------------|-----------------|--------|--------|----------------------|----------------|--------------|----------------|----------------|
| | (μH) | Tol. % | | | | | | |
| SDR0602-2R7ML | 2.7 | ± 20 | 20 | 7.96 | 40 | 0.12 | 1.50 | 2.10 |
| SDR0602-3R9ML | 3.9 | ± 20 | 20 | 7.96 | 40 | 0.13 | 1.40 | 1.90 |
| SDR0602-4R7ML | 4.7 | ± 20 | 20 | 7.96 | 35 | 0.15 | 1.30 | 1.80 |
| SDR0602-5R6ML | 5.6 | ± 20 | 18 | 7.96 | 30 | 0.17 | 1.20 | 1.60 |
| SDR0602-6R8ML | 6.8 | ± 20 | 18 | 7.96 | 28 | 0.18 | 1.15 | 1.55 |
| SDR0602-8R2ML | 8.2 | ± 20 | 15 | 7.96 | 27 | 0.20 | 1.10 | 1.43 |
| SDR0602-100ML | 10 | ± 20 | 50 | 2.52 | 25 | 0.24 | 1.00 | 1.32 |
| SDR0602-120ML | 12 | ± 20 | 45 | 2.52 | 21 | 0.26 | 0.90 | 1.17 |
| SDR0602-150ML | 15 | ± 20 | 45 | 2.52 | 20 | 0.28 | 0.80 | 1.10 |
| SDR0602-180ML | 18 | ± 20 | 45 | 2.52 | 18 | 0.30 | 0.75 | 1.07 |
| SDR0602-220ML | 22 | ± 20 | 45 | 2.52 | 16 | 0.40 | 0.70 | 0.90 |
| SDR0602-270ML | 27 | ± 20 | 40 | 2.52 | 15 | 0.45 | 0.65 | 0.83 |
| SDR0602-330KL | 33 | ± 10 | 35 | 2.52 | 12 | 0.50 | 0.60 | 0.73 |
| SDR0602-390KL | 39 | ± 10 | 32 | 2.52 | 12 | 0.65 | 0.55 | 0.68 |
| SDR0602-470KL | 47 | ± 10 | 30 | 2.52 | 11 | 0.68 | 0.50 | 0.62 |
| SDR0602-560KL | 56 | ± 10 | 30 | 2.52 | 10 | 0.78 | 0.45 | 0.57 |
| SDR0602-680KL | 68 | ± 10 | 27 | 2.52 | 9 | 0.85 | 0.40 | 0.52 |
| SDR0602-820KL | 82 | ± 10 | 27 | 2.52 | 8 | 1.30 | 0.35 | 0.46 |
| SDR0602-101KL | 100 | ±10 | 50 | 0.796 | 7 | 1.52 | 0.32 | 0.42 |
| SDR0602-121KL | 120 | ± 10 | 50 | 0.796 | 6 | 1.65 | 0.30 | 0.38 |
| SDR0602-151KL | 150 | ± 10 | 60 | 0.796 | 6 | 2.00 | 0.26 | 0.24 |
| SDR0602-181KL | 180 | ± 10 | 55 | 0.796 | 5 | 2.30 | 0.23 | 0.32 |
| SDR0602-221KL | 220 | ± 10 | 55 | 0.796 | 5 | 2.50 | 0.20 | 0.29 |
| SDR0602-271KL | 270 | ± 10 | 55 | 0.796 | 4 | 2.85 | 0.18 | 0.26 |
| SDR0602-331KL | 330 | ± 10 | 55 | 0.796 | 4 | 3.80 | 0.16 | 0.22 |
| SDR0602-391KL | 390 | ± 10 | 55 | 0.796 | 3 | 4.20 | 0.15 | 0.20 |
| SDR0602-471KL | 470 | ± 10 | 55 | 0.796 | 3 | 5.00 | 0.14 | 0.18 |
| SDR0602-561KL | 560 | ± 10 | 55 | 0.796 | 3 | 6.20 | 0.12 | 0.14 |

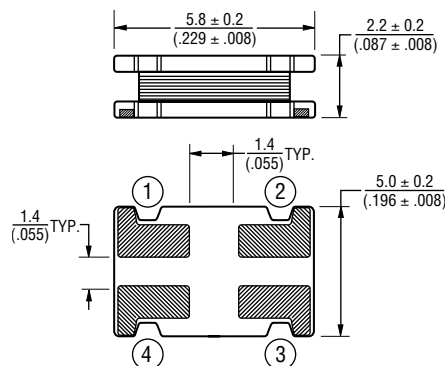
General Specifications

Test Voltage.....1 Volt
 Reflow Soldering.....260 °C, 50 sec max.
 Operating Temperature...-40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature...-40 °C to +125 °C
 Packaging.....800 pcs. per reel
 Resistance to Soldering Heat
260 °C for 5 sec.

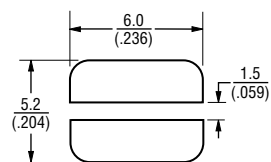
Materials

Core MaterialFerrite DQ
 WireEnameled Copper
 Terminal.....Ag/Ni/Sn
 Rated Current...Ind. drop 10 % typ. at Isat
 Temperature Rise...40 °C max at rated Irms

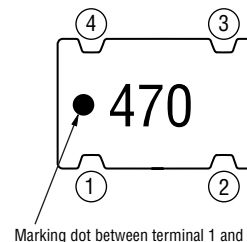
Product Dimensions



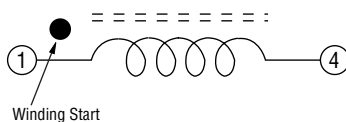
Recommended Layout



Typical Part Marking



Electrical Schematic



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

*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.

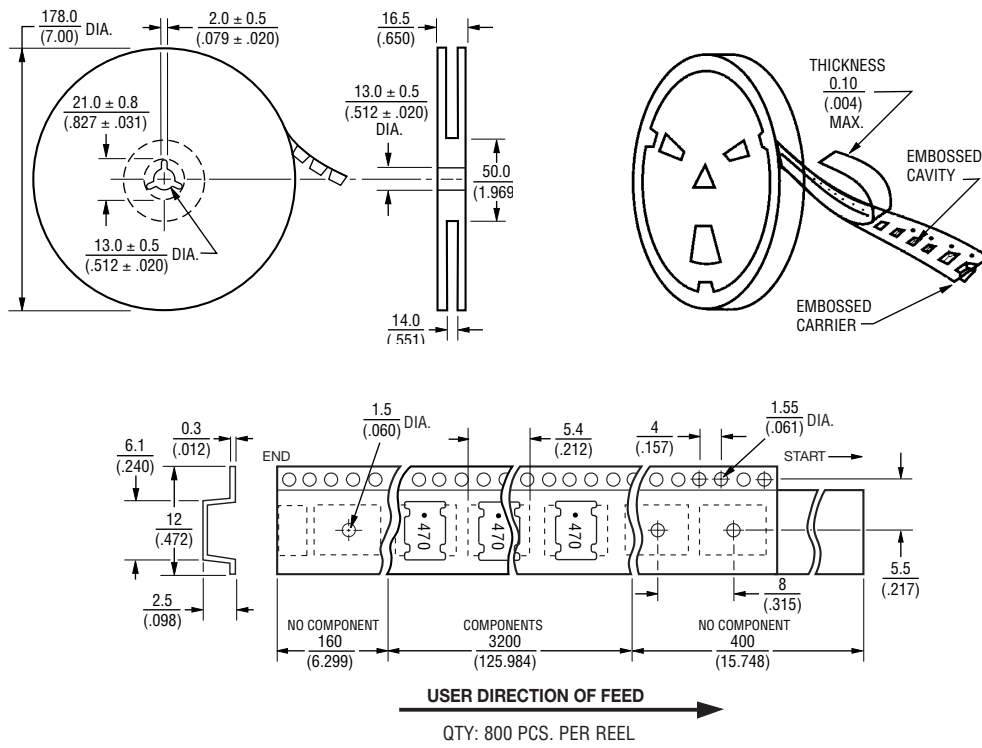
Applications

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

SDR0602 Series - SMD Power Inductors

BOURNS®

Packaging Specifications



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

REV. 09/23/10

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