



**THE DATASHEET OF  
SDR0602-181KL**





### 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The SDR0602 Series is obsolete and not recommended for new designs.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           |

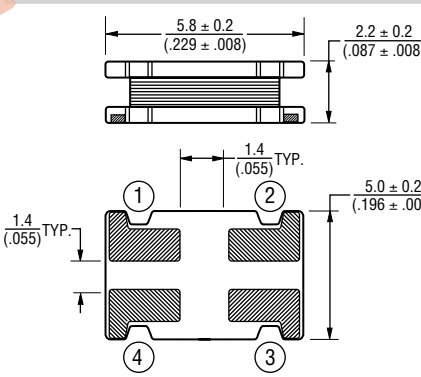
### General Specifications

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.

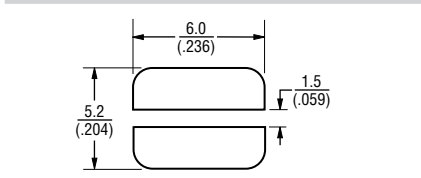
### Materials

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

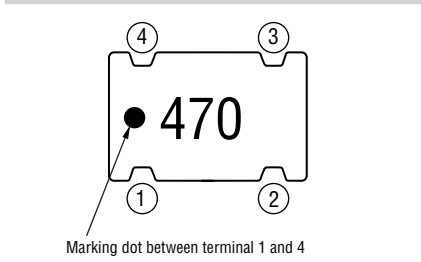
### Product Dimensions



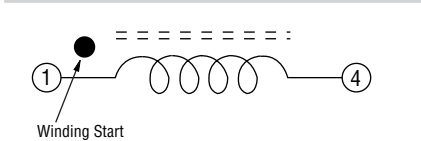
### Recommended Layout



### Typical Part Marking



### Electrical Schematic



\*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.

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

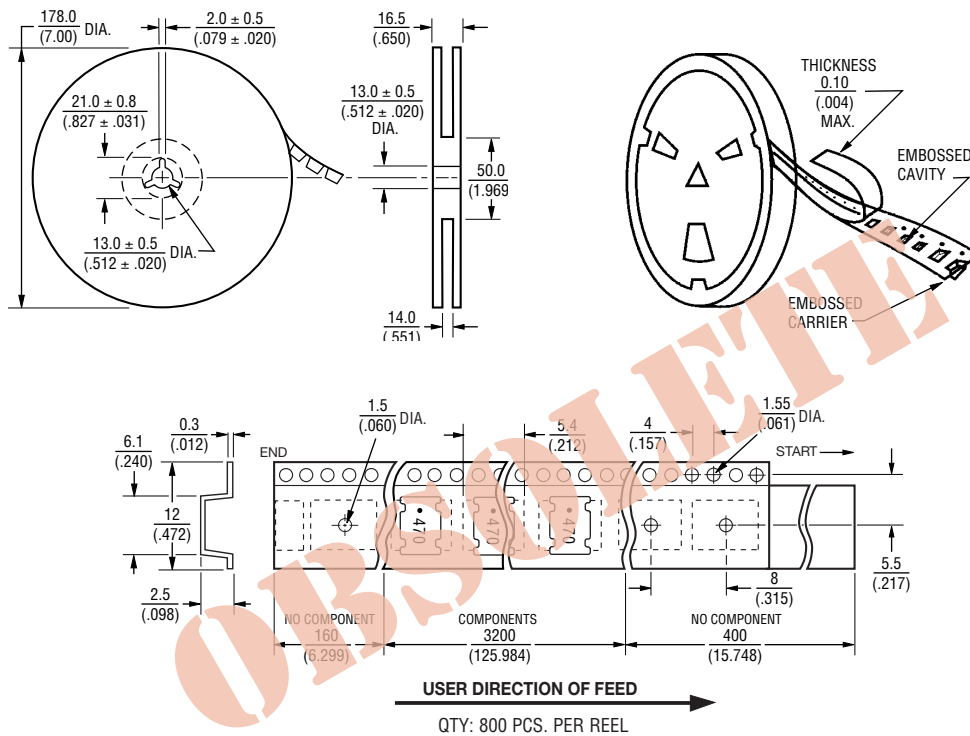
## Applications

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

## Looking for pricing, stock, or lifecycle information?

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