



## Features

- Available in E12 series
- Unit height of 2.2 mm
- Current up to 1.5 A
- High Q level
- Lead free version available (see How to Order)
- Lead free versions are RoHS compliant\*

## SDR0602 Series - SMD High Power Inductor

## Applications

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

### Electrical Specifications

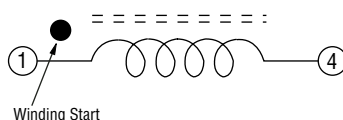
| Bourns Part No. | Inductance 1kHz |        | Q Ref. | Test Frequency (MHz) | SRF Min. (MHz) | RDC (Ω) | I rms Max. (A) | I sat Typ. (A) |
|-----------------|-----------------|--------|--------|----------------------|----------------|---------|----------------|----------------|
|                 | (μH)            | Tol. % |        |                      |                |         |                |                |
| SDR0602-2R7M    | 2.7             | ± 20   | 20     | 7.96                 | 40             | 0.12    | 1.50           | 2.10           |
| SDR0602-3R9M    | 3.9             | ± 20   | 20     | 7.96                 | 40             | 0.13    | 1.40           | 1.90           |
| SDR0602-4R7M    | 4.7             | ± 20   | 20     | 7.96                 | 35             | 0.15    | 1.30           | 1.80           |
| SDR0602-5R6M    | 5.6             | ± 20   | 18     | 7.96                 | 30             | 0.17    | 1.20           | 1.60           |
| SDR0602-6R8M    | 6.8             | ± 20   | 18     | 7.96                 | 28             | 0.18    | 1.15           | 1.55           |
| SDR0602-8R2M    | 8.2             | ± 20   | 15     | 7.96                 | 27             | 0.20    | 1.10           | 1.43           |
| SDR0602-100M    | 10              | ± 20   | 50     | 2.52                 | 25             | 0.24    | 1.00           | 1.32           |
| SDR0602-120M    | 12              | ± 20   | 45     | 2.52                 | 21             | 0.26    | 0.90           | 1.17           |
| SDR0602-150M    | 15              | ± 20   | 45     | 2.52                 | 20             | 0.28    | 0.80           | 1.10           |
| SDR0602-180M    | 18              | ± 20   | 45     | 2.52                 | 18             | 0.30    | 0.75           | 1.07           |
| SDR0602-220M    | 22              | ± 20   | 45     | 2.52                 | 16             | 0.40    | 0.70           | 0.90           |
| SDR0602-270M    | 27              | ± 20   | 40     | 2.52                 | 15             | 0.45    | 0.65           | 0.83           |
| SDR0602-330K    | 33              | ± 10   | 35     | 2.52                 | 12             | 0.50    | 0.60           | 0.73           |
| SDR0602-390K    | 39              | ± 10   | 32     | 2.52                 | 12             | 0.65    | 0.55           | 0.68           |
| SDR0602-470K    | 47              | ± 10   | 30     | 2.52                 | 11             | 0.68    | 0.50           | 0.62           |
| SDR0602-560K    | 56              | ± 10   | 30     | 2.52                 | 10             | 0.78    | 0.45           | 0.57           |
| SDR0602-680K    | 68              | ± 10   | 27     | 2.52                 | 9              | 0.85    | 0.40           | 0.52           |
| SDR0602-820K    | 82              | ± 10   | 27     | 2.52                 | 8              | 1.30    | 0.35           | 0.46           |
| SDR0602-101K    | 100             | ± 10   | 50     | 0.796                | 7              | 1.52    | 0.32           | 0.42           |
| SDR0602-121K    | 120             | ± 10   | 50     | 0.796                | 6              | 1.65    | 0.30           | 0.38           |
| SDR0602-151K    | 150             | ± 10   | 60     | 0.796                | 6              | 2.00    | 0.26           | 0.24           |
| SDR0602-181K    | 180             | ± 10   | 55     | 0.796                | 5              | 2.30    | 0.23           | 0.32           |
| SDR0602-221K    | 220             | ± 10   | 55     | 0.796                | 5              | 2.50    | 0.20           | 0.29           |
| SDR0602-271K    | 270             | ± 10   | 55     | 0.796                | 4              | 2.85    | 0.18           | 0.26           |
| SDR0602-331K    | 330             | ± 10   | 55     | 0.796                | 4              | 3.80    | 0.16           | 0.22           |
| SDR0602-391K    | 390             | ± 10   | 55     | 0.796                | 3              | 4.20    | 0.15           | 0.20           |
| SDR0602-471K    | 470             | ± 10   | 55     | 0.796                | 3              | 5.00    | 0.14           | 0.18           |
| SDR0602-561K    | 560             | ± 10   | 55     | 0.796                | 3              | 6.20    | 0.12           | 0.14           |

Multiple winding possible (up to two windings).

### How to Order

Model **SDR0602 - 100M**  
 Value/Tolerance: from table  
 Termination  
 L = Ag/Ni/Sn  
 Blank = Ag/Ni/SnPb

### Electrical Schematic



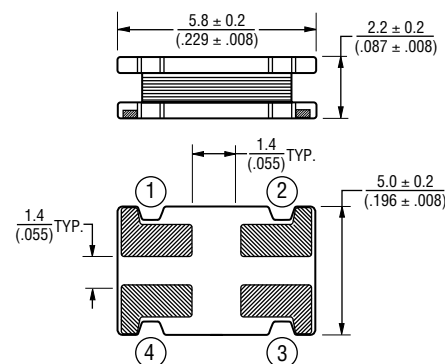
### General Specifications

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.

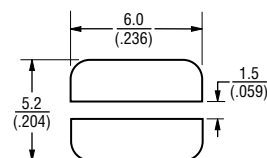
### Materials

Core Material.....Ferrite DQ  
 Wire .....Enamelled Copper  
 Terminal .....See How to Order  
 Rated Current ...Ind. drop 10 % typ. at Isat  
 Temperature Rise ...40 °C max at rated I rms

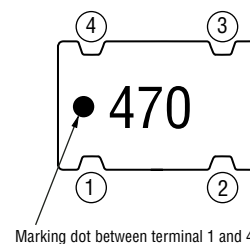
### Product Dimensions



### Recommended Layout



### Typical Part Marking



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

**BOURNS®**

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