



**THE DATASHEET OF
SDR0403-8R2ML**





Features

- Available in E12 series
- Low profile of only 3.2 mm
- Low inductance values
- RoHS compliant*

Applications

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

SDR0403 Series - SMD Power Inductors

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. % | | | | | | |
| SDR0403-1R0ML | 1.0 | ± 20 | 28 | 7.96 | 150 | 0.033 | 3.80 | 5.50 |
| SDR0403-1R4ML | 1.4 | ± 20 | 28 | 7.96 | 110 | 0.038 | 3.30 | 5.10 |
| SDR0403-1R8ML | 1.8 | ± 20 | 28 | 7.96 | 90 | 0.042 | 2.91 | 4.40 |
| SDR0403-2R2ML | 2.2 | ± 20 | 28 | 7.96 | 80 | 0.047 | 2.60 | 3.90 |
| SDR0403-2R7ML | 2.7 | ± 20 | 28 | 7.96 | 75 | 0.052 | 2.43 | 3.50 |
| SDR0403-3R3ML | 3.3 | ± 20 | 28 | 7.96 | 65 | 0.058 | 2.15 | 3.00 |
| SDR0403-3R9ML | 3.9 | ± 20 | 28 | 7.96 | 55 | 0.076 | 1.98 | 2.70 |
| SDR0403-4R7ML | 4.7 | ± 20 | 28 | 7.96 | 50 | 0.094 | 1.70 | 2.60 |
| SDR0403-5R6ML | 5.6 | ± 20 | 28 | 7.96 | 45 | 0.10 | 1.60 | 2.40 |
| SDR0403-6R8ML | 6.8 | ± 20 | 28 | 7.96 | 40 | 0.12 | 1.41 | 2.10 |
| SDR0403-8R2ML | 8.2 | ± 20 | 28 | 7.96 | 36 | 0.13 | 1.26 | 1.90 |
| SDR0403-100ML | 10 | ± 20 | 28 | 2.52 | 33 | 0.18 | 1.15 | 1.70 |
| SDR0403-120ML | 12 | ± 20 | 28 | 2.52 | 30 | 0.21 | 1.05 | 1.60 |
| SDR0403-150ML | 15 | ± 20 | 28 | 2.52 | 28 | 0.24 | 0.92 | 1.40 |
| SDR0403-180ML | 18 | ± 20 | 25 | 2.52 | 23 | 0.34 | 0.84 | 1.30 |
| SDR0403-220ML | 22 | ± 20 | 25 | 2.52 | 20 | 0.38 | 0.76 | 1.20 |
| SDR0403-270KL | 27 | ± 10 | 23 | 2.52 | 17 | 0.52 | 0.71 | 1.00 |
| SDR0403-330KL | 33 | ± 10 | 23 | 2.52 | 15 | 0.54 | 0.64 | 0.99 |
| SDR0403-390KL | 39 | ± 10 | 20 | 2.52 | 14 | 0.59 | 0.59 | 0.92 |
| SDR0403-470KL | 47 | ± 10 | 20 | 2.52 | 13 | 0.84 | 0.54 | 0.78 |
| SDR0403-560KL | 56 | ± 10 | 20 | 2.52 | 12 | 0.94 | 0.50 | 0.74 |
| SDR0403-680KL | 68 | ± 10 | 20 | 2.52 | 11 | 1.12 | 0.46 | 0.68 |
| SDR0403-820KL | 82 | ± 10 | 25 | 2.52 | 10 | 1.27 | 0.42 | 0.58 |
| SDR0403-101KL | 100 | ± 10 | 35 | 0.796 | 9 | 1.90 | 0.35 | 0.51 |
| SDR0403-121KL | 120 | ± 10 | 50 | 0.796 | 8 | 2.20 | 0.32 | 0.44 |
| SDR0403-151KL | 150 | ± 10 | 50 | 0.796 | 8 | 3.40 | 0.26 | 0.40 |
| SDR0403-181KL | 180 | ± 10 | 50 | 0.796 | 5 | 3.90 | 0.24 | 0.39 |
| SDR0403-221KL | 220 | ± 10 | 50 | 0.796 | 4 | 4.40 | 0.22 | 0.33 |
| SDR0403-271KL | 270 | ± 10 | 45 | 0.796 | 3 | 5.00 | 0.20 | 0.30 |
| SDR0403-331KL | 330 | ± 10 | 40 | 0.796 | 4 | 6.00 | 0.17 | 0.25 |
| SDR0403-391KL | 390 | ± 10 | 40 | 0.796 | 3.5 | 6.40 | 0.15 | 0.22 |
| SDR0403-471KL | 470 | ± 10 | 50 | 0.796 | 3 | 7.00 | 0.13 | 0.19 |
| SDR0403-561KL | 560 | ± 10 | 50 | 0.796 | 2.8 | 7.80 | 0.12 | 0.18 |
| SDR0403-681KL | 680 | ± 10 | 40 | 0.796 | 2.8 | 8.60 | 0.11 | 0.16 |
| SDR0403-821KL | 820 | ± 10 | 38 | 0.796 | 2.5 | 12.00 | 0.10 | 0.15 |
| SDR0403-102KL | 1000 | ± 10 | 38 | 0.252 | 2 | 14.00 | 0.09 | 0.13 |

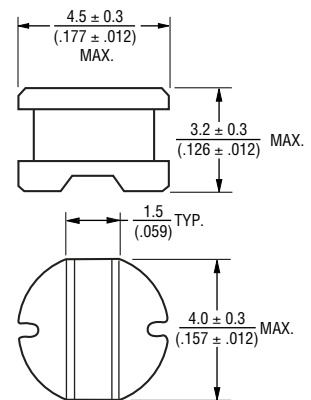
General Specifications

Test Voltage 1 V
 Operating Temperature ... -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature... -55 °C to +125 °C
 Moisture Sensitivity Level..... 1
 ESD Classification (HBM)..... N/A

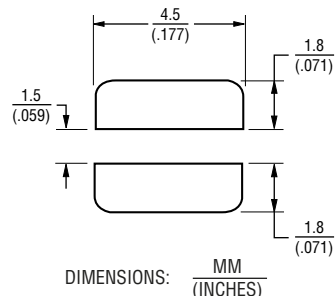
Materials

Core..... Ferrite DR
 Wire Enameled copper
 Terminal..... Ag/Ni/Sn
 Rated Current.. Ind. drop 10 % typ. at Isat
 Temp. Rise..... 40 °C max. at rated Irms
 Packaging..... 2000 pcs. per reel

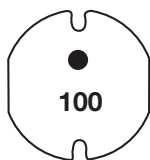
Product Dimensions



Recommended Layout



Typical Part Marking



Electrical Schematic



WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
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SDR0403 Series - SMD Power Inductors

BOURNS®

Packaging Specifications



BOURNS®

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

EMEA: Tel: +36 88 520 390 • Email: eurocus@bourns.com

The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

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