Features
- Available in E6 series
- Low profile of only 5.0 mm
- Inductance as low as 0.68 µH
- RoHS compliant*

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

SDR1005 Series - SMD Power Inductors

Test Voltage .................... 0.1 V, 100 KHz
Reflow Soldering .................. 250 °C, 10 sec. max.
(in compliance with JEDEC, J-STD-020C, Table 4-2)
Operating Temperature .............. -40 °C to +125 °C
(resistance to soldering heat included)
Storage Temperature ................ -40 °C to +125 °C
Resistance to Soldering Heat ............ +250 °C, 10 sec. max.
Moisture Sensitivity Level .......... 1

Bourns Part Number
Inductance
1 kHz
Q
Ref.
Test
Frequency
Q (MHz)
SRF
Min.
(MHz)
RDC
Max.
(Ω)
I rms
Max.
(A)
I sat
Typ.
(A)
SDR1005-R68ML 0.68 ± 20 26 7.960 160 0.006 8.50 9.50
SDR1005-1R0ML 1 ± 20 55 2.600 137 0.007 7.50 9.00
SDR1005-1R5ML 1.5 ± 20 50 3.000 95 0.009 6.50 8.00
SDR1005-2R2ML 2.2 ± 20 51 2.470 65 0.012 6.10 7.00
SDR1005-2R5ML 2.5 ± 20 49 3.000 56 0.012 5.50 7.00
SDR1005-3R3ML 3.3 ± 20 45 2.520 54 0.015 5.00 6.40
SDR1005-4R7ML 4.7 ± 20 46 2.700 42 0.019 4.50 5.40
SDR1005-6R8ML 6.8 ± 20 56 2.000 31 0.030 3.40 4.50
SDR1005-100ML 10 ± 20 43 4.000 26 0.050 2.90 3.70
SDR1005-150ML 15 ± 20 42 2.700 22 0.060 2.50 3.00
SDR1005-220ML 22 ± 20 29 2.520 18 0.10 2.00 2.50
SDR1005-330KL 33 ± 10 29 2.200 14 0.12 1.80 2.00
SDR1005-33KL 33 ± 10 29 2.200 14 0.12 1.80 2.00
SDR1005-47KL 47 ± 10 30 2.200 12 0.19 1.40 1.60
SDR1005-68KL 68 ± 10 30 2.200 12 0.24 1.20 1.40
SDR1005-100KL 100 ± 10 24 2.200 11 0.30 1.10 1.30
SDR1005-150KL 150 ± 10 24 2.200 11 0.40 0.90 1.10
SDR1005-220KL 220 ± 10 22 2.200 10 0.53 0.70 0.80
SDR1005-300KL 330 ± 10 18 2.200 8 0.78 0.70 0.80
SDR1005-470KL 470 ± 10 18 2.200 7 1.15 0.50 0.60
SDR1005-680KL 680 ± 10 16 2.200 7 1.70 0.45 0.50
SDR1005-1000KL 1000 ± 10 13 2.200 6 2.60 0.35 0.40
SDR1005-1500KL 1500 ± 10 13 2.200 6 3.90 0.30 0.35
SDR1005-2200KL 2200 ± 10 13 2.200 6 4.30 0.25 0.30
SDR1005-3300KL 3300 ± 10 12 2.200 5 6.30 0.20 0.24
SDR1005-4700KL 4700 ± 10 12 2.200 5 8.20 0.20 0.24
SDR1005-6800KL 6800 ± 10 12 2.200 5 14.00 0.16 0.16
SDR1005-8200KL 8200 ± 10 12 2.200 5 20.00 0.11 0.12
SDR1005-10300KL 10300 ± 10 12 2.200 5 34.00 0.10 0.12

General Specifications
- Core: Ferrite DR
- Wire: Enamelled copper
- Base: DAP
- Terminal: Cu/Sn
- Rated Current: Ind. drop 10 % typ. at Isat
- Temperature Rise: 15 °C max. at rated I rms
- Packaging: 600 pcs. per reel

Materials
- Core: Ferrite DR
- Wire: Enamelled copper
- Base: DAP
- Terminal: Cu/Sn

Electrical Schematic

Recommended Layout

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

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SDR1005 Series - SMD Power Inductors

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