



Features

- Available in E12 series
- Low height of only 7.0 mm
- Inductance as low as 0.78 μH
- High current up to 16 amps
- RoHS compliant*

Applications

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

SDR2207 Series - SMD Power Inductors

Electrical Specifications

| Bourns Part Number | Inductance 100 kHz | | Q Ref. | Test Frequency (MHz) | SRF Min. (MHz) | RDC Max. (m Ω) | I rms Max. (A) | I sat Typ. (A) |
|--------------------|--------------------|----------|--------|----------------------|----------------|------------------------|----------------|----------------|
| | (μH) | Tol. % | | | | | | |
| SDR2207-R78ML | 0.78 | ± 20 | 30 | 5 | 104.0 | 2.6 | 15.0 | 30.0 |
| SDR2207-R80ML | 0.8 | ± 20 | 30 | 5 | 102.0 | 2.8 | 16.0 | 35.0 |
| SDR2207-1R2ML | 1.2 | ± 20 | 30 | 3 | 70.0 | 3.8 | 15.0 | 30.0 |
| SDR2207-1R5ML | 1.5 | ± 20 | 30 | 3 | 60.0 | 5.0 | 15.0 | 25.0 |
| SDR2207-1R8ML | 1.8 | ± 20 | 31 | 3 | 51.0 | 4.5 | 13.0 | 25.0 |
| SDR2207-2R2ML | 2.2 | ± 20 | 35 | 3 | 51.0 | 7.5 | 13.0 | 20.0 |
| SDR2207-2R7ML | 2.7 | ± 20 | 38 | 3 | 51.0 | 7.0 | 10.0 | 20.0 |
| SDR2207-3R3ML | 3.3 | ± 20 | 38 | 3 | 39.0 | 7.8 | 9.0 | 17.0 |
| SDR2207-3R9ML | 3.9 | ± 20 | 38 | 3 | 36.0 | 12.0 | 9.0 | 15.0 |
| SDR2207-4R7ML | 4.7 | ± 20 | 38 | 3 | 33.0 | 8.8 | 8.5 | 15.0 |
| SDR2207-5R6ML | 5.6 | ± 20 | 50 | 3 | 30.0 | 13.4 | 7.8 | 14.0 |
| SDR2207-6R0ML | 6.0 | ± 20 | 43 | 3 | 28.0 | 17.0 | 7.5 | 12.0 |
| SDR2207-6R8ML | 6.8 | ± 20 | 38 | 3 | 27.0 | 14.2 | 7.5 | 12.0 |
| SDR2207-7R8ML | 7.8 | ± 20 | 36 | 3 | 26.0 | 20.0 | 7.5 | 11.0 |
| SDR2207-8R2ML | 8.2 | ± 20 | 35 | 3 | 25.0 | 15.5 | 7.0 | 11.0 |
| SDR2207-100ML | 10 | ± 20 | 53 | 5 | 20.0 | 17.2 | 6.5 | 10.0 |
| SDR2207-120YL | 12 | ± 15 | 50 | 5 | 19.0 | 23.6 | 5.5 | 9.5 |
| SDR2207-150YL | 15 | ± 15 | 38 | 5 | 16.0 | 28.8 | 5.0 | 9.0 |
| SDR2207-180YL | 18 | ± 15 | 46 | 5 | 15.0 | 33.0 | 4.6 | 8.0 |
| SDR2207-220YL | 22 | ± 15 | 27 | 3 | 14.0 | 39.4 | 4.0 | 6.5 |
| SDR2207-270YL | 27 | ± 15 | 22 | 3 | 12.0 | 43.5 | 3.8 | 6.0 |
| SDR2207-330YL | 33 | ± 15 | 27 | 3 | 11.0 | 58.4 | 3.4 | 5.5 |
| SDR2207-390KL | 39 | ± 10 | 18 | 3 | 10.0 | 65.0 | 3.2 | 5.2 |
| SDR2207-470KL | 47 | ± 10 | 27 | 3 | 9.0 | 91.2 | 2.8 | 5.0 |
| SDR2207-560KL | 56 | ± 10 | 25 | 2 | 8.3 | 96.5 | 2.6 | 4.5 |
| SDR2207-680KL | 68 | ± 10 | 18 | 2 | 7.9 | 112.0 | 2.4 | 4.0 |
| SDR2207-820KL | 82 | ± 10 | 28 | 2 | 6.5 | 144.0 | 2.3 | 3.5 |
| SDR2207-101KL | 100 | ± 10 | 18 | 2 | 6.2 | 168.0 | 2.2 | 3.0 |
| SDR2207-121KL | 120 | ± 10 | 20 | 2 | 6.0 | 230.0 | 1.6 | 3.0 |
| SDR2207-151KL | 150 | ± 10 | 22 | 2 | 5.8 | 250.0 | 1.5 | 2.6 |
| SDR2207-181KL | 180 | ± 10 | 20 | 2 | 5.7 | 300.0 | 1.3 | 2.5 |
| SDR2207-221KL | 220 | ± 10 | 19 | 2 | 5.5 | 380.0 | 1.2 | 2.4 |
| SDR2207-271KL | 270 | ± 10 | 17 | 2 | 5.3 | 470.0 | 1.1 | 2.2 |
| SDR2207-331KL | 330 | ± 10 | 20 | 1 | 5.1 | 560.0 | 1.0 | 1.9 |
| SDR2207-391KL | 390 | ± 10 | 17 | 1 | 4.9 | 680.0 | 0.9 | 1.7 |
| SDR2207-471KL | 470 | ± 10 | 19 | 1 | 4.7 | 850.0 | 0.8 | 1.4 |
| SDR2207-561KL | 560 | ± 10 | 18 | 1 | 4.5 | 1000 | 0.8 | 1.3 |
| SDR2207-681KL | 680 | ± 10 | 16 | 1 | 4.2 | 1100 | 0.7 | 1.2 |
| SDR2207-821KL | 820 | ± 10 | 16 | 1 | 3.9 | 1400 | 0.6 | 1.1 |
| SDR2207-102KL | 1000 | ± 10 | 15 | 1 | 3.5 | 1800 | 0.6 | 1.0 |

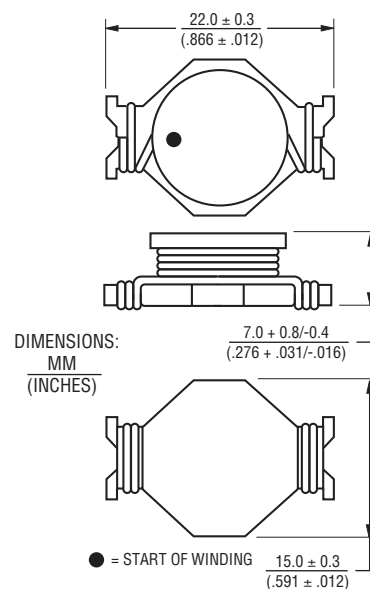
General Specifications

Test Voltage 0.1 V
 Reflow Soldering ... 230 °C, 10 sec. max
 (In compliance with JEDEC, J-STD-020C, Table 4-2)
 Operating Temperature -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature... -40 °C to +125 °C
 Resistance to Soldering Heat 250 °C, 10 sec. max.
 Moisture Sensitivity Level..... 1
 ESD Classification (HBM)..... N/A

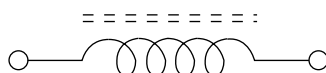
Materials

Core Ferrite DR
 Wire Enamelled copper
 Base Phenolic T375J
 Terminal..... Cu/Ag/Sn
 Rated Current Ind. drop 10 % typ. at Isat
 Temperature Rise 40 °C max. at rated I rms
 Packaging..... 250 pcs. per reel

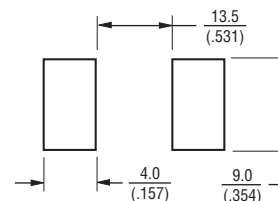
Product Dimensions



Electrical Schematic



Recommended Layout



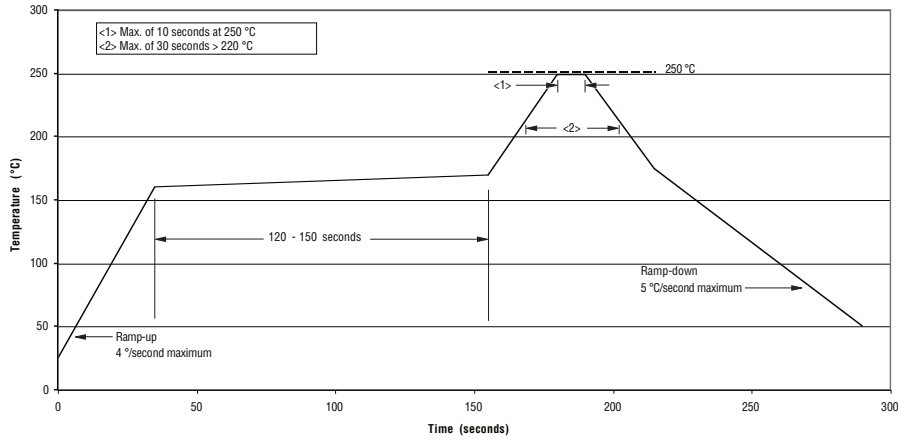
WARNING
 Cancer and Reproductive Harm -
www.P65Warnings.ca.gov

* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
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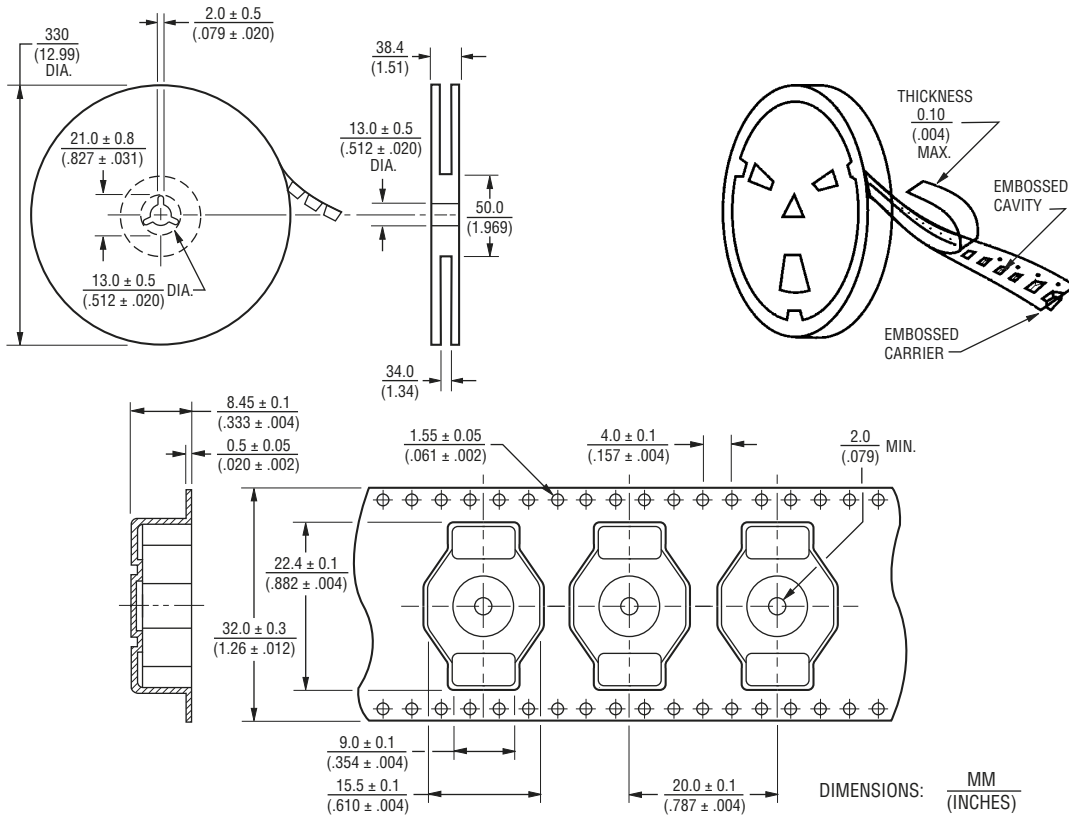
SDR2207 Series - SMD Power Inductors

BOURNS®

Soldering Profile



Packaging Specifications



QTY: 250 PCS. PER REEL

REV. 03/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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