

#### **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<br>Part Number | Inductance<br>100 kHz |        | Q    | Test<br>Frequency | SRF<br>Min. | RDC<br>Max.  | I rms<br>Max. | l sat<br>Typ. |
|-----------------------|-----------------------|--------|------|-------------------|-------------|--------------|---------------|---------------|
|                       | (μH)                  | Tol. % | Ref. | (MHz)             | (MHz)       | Max.<br>(mΩ) | (A)           | (A)           |
| 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           |

#### **Electrical Schematic**



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



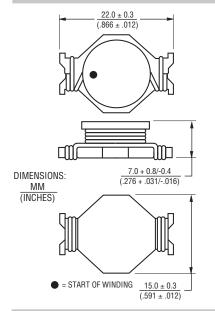
# \*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at <a href="https://www.bourns.com/docs/legal/disclaimer.pdf">www.bourns.com/docs/legal/disclaimer.pdf</a>

#### **General Specifications**

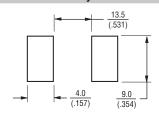
Test Voltage ......0.1 V

#### **Materials**

#### **Product Dimensions**



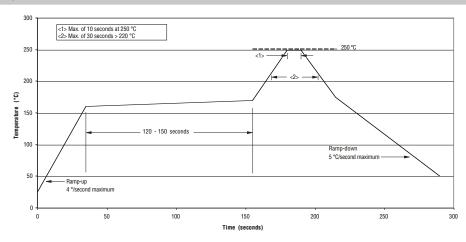
#### **Recommended Layout**



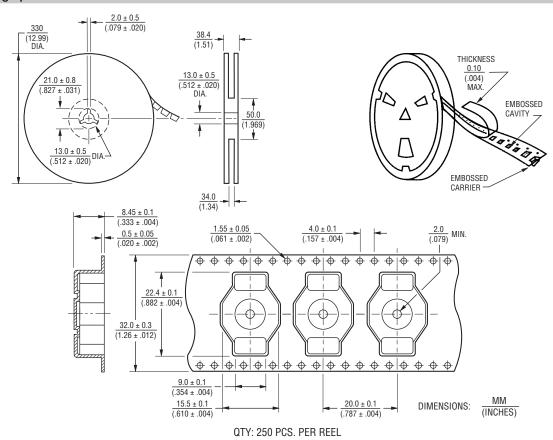
# **SDR2207 Series - SMD Power Inductors**

## **BOURNS**®

#### **Soldering Profile**



#### **Packaging Specifications**



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SDR2207-R80M SDR2207-6R8ML SDR2207-120Y SDR2207-8R2ML SDR2207-391KL SDR2207-560K

SDR2207-151K SDR2207-181KL SDR2207-102K SDR2207-681KL SDR2207-4R7M SDR2207-390KL SDR2207
1R2ML SDR2207-270YL SDR2207-150Y SDR2207-681K SDR2207-271KL SDR2207-331KL SDR2207-471K

SDR2207-5R6ML SDR2207-180YL SDR2207-100M SDR2207-1R2M SDR2207-221KL SDR2207-5R6M SDR2207
330Y SDR2207-221K SDR2207-330K SDR2207-470K SDR2207-8R2M SDR2207-121KL SDR2207-561KL

SDR2207-3R3M SDR2207-2R7M SDR2207-100ML SDR2207-120YL SDR2207-180Y SDR2207-560KL SDR2207
821K SDR2207-391K SDR2207-271K SDR2207-1R8M SDR2207-151KL SDR2207-6R8M SDR2207-4R7ML

SDR2207-390K SDR2207-220Y SDR2207-270Y SDR2207-150YL SDR2207-680KL SDR2207-331K SDR2207
101K SDR2207-181K SDR2207-330YL SDR2207-471KL SDR2207-102KL SDR2207-680K SDR2207-101KL

SDR2207-470KL SDR2207-1R8ML SDR2207-330KL SDR2207-821KL SDR2207-121K SDR2207-561K SDR2207
R80ML SDR2207-220YL SDR2207-2R7ML SDR2207-3R3ML SDR2207-2R2ML SDR2207-6R0ML SDR2207-820KL SDR2207-1R5ML SDR2207-7R8ML SDR2207-7R8ML SDR2207-3R9ML SDR2207-6R0ML SDR2207-820KL SDR2207-1R5ML SDR2207-7R8ML SDR2207-7R8ML SDR2207-3R9ML SDR2207-3R9ML