



### Features

- Available in E12 series
- Low height of only 7.0 mm
- Inductance as low as 0.78  $\mu\text{H}$
- 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 $\Omega$ )	I rms Max. (A)	I sat Typ. (A)
	( $\mu\text{H}$ )	Tol. %						
SDR2207-R78ML	0.78	$\pm 20$	30	5	104.0	2.6	15.0	30.0
SDR2207-R80ML	0.8	$\pm 20$	30	5	102.0	2.8	16.0	35.0
SDR2207-1R2ML	1.2	$\pm 20$	30	3	70.0	3.8	15.0	30.0
SDR2207-1R5ML	1.5	$\pm 20$	30	3	60.0	5.0	15.0	25.0
SDR2207-1R8ML	1.8	$\pm 20$	31	3	51.0	4.5	13.0	25.0
SDR2207-2R2ML	2.2	$\pm 20$	35	3	51.0	7.5	13.0	20.0
SDR2207-2R7ML	2.7	$\pm 20$	38	3	51.0	7.0	10.0	20.0
SDR2207-3R3ML	3.3	$\pm 20$	38	3	39.0	7.8	9.0	17.0
SDR2207-3R9ML	3.9	$\pm 20$	38	3	36.0	12.0	9.0	15.0
SDR2207-4R7ML	4.7	$\pm 20$	38	3	33.0	8.8	8.5	15.0
SDR2207-5R6ML	5.6	$\pm 20$	50	3	30.0	13.4	7.8	14.0
SDR2207-6R0ML	6.0	$\pm 20$	43	3	28.0	17.0	7.5	12.0
SDR2207-6R8ML	6.8	$\pm 20$	38	3	27.0	14.2	7.5	12.0
SDR2207-7R8ML	7.8	$\pm 20$	36	3	26.0	20.0	7.5	11.0
SDR2207-8R2ML	8.2	$\pm 20$	35	3	25.0	15.5	7.0	11.0
SDR2207-100ML	10	$\pm 20$	53	5	20.0	17.2	6.5	10.0
SDR2207-120YL	12	$\pm 15$	50	5	19.0	23.6	5.5	9.5
SDR2207-150YL	15	$\pm 15$	38	5	16.0	28.8	5.0	9.0
SDR2207-180YL	18	$\pm 15$	46	5	15.0	33.0	4.6	8.0
SDR2207-220YL	22	$\pm 15$	27	3	14.0	39.4	4.0	6.5
SDR2207-270YL	27	$\pm 15$	22	3	12.0	43.5	3.8	6.0
SDR2207-330YL	33	$\pm 15$	27	3	11.0	58.4	3.4	5.5
SDR2207-390KL	39	$\pm 10$	18	3	10.0	65.0	3.2	5.2
SDR2207-470KL	47	$\pm 10$	27	3	9.0	91.2	2.8	5.0
SDR2207-560KL	56	$\pm 10$	25	2	8.3	96.5	2.6	4.5
SDR2207-680KL	68	$\pm 10$	18	2	7.9	112.0	2.4	4.0
SDR2207-820KL	82	$\pm 10$	28	2	6.5	144.0	2.3	3.5
SDR2207-101KL	100	$\pm 10$	18	2	6.2	168.0	2.2	3.0
SDR2207-121KL	120	$\pm 10$	20	2	6.0	230.0	1.6	3.0
SDR2207-151KL	150	$\pm 10$	22	2	5.8	250.0	1.5	2.6
SDR2207-181KL	180	$\pm 10$	20	2	5.7	300.0	1.3	2.5
SDR2207-221KL	220	$\pm 10$	19	2	5.5	380.0	1.2	2.4
SDR2207-271KL	270	$\pm 10$	17	2	5.3	470.0	1.1	2.2
SDR2207-331KL	330	$\pm 10$	20	1	5.1	560.0	1.0	1.9
SDR2207-391KL	390	$\pm 10$	17	1	4.9	680.0	0.9	1.7
SDR2207-471KL	470	$\pm 10$	19	1	4.7	850.0	0.8	1.4
SDR2207-561KL	560	$\pm 10$	18	1	4.5	1000	0.8	1.3
SDR2207-681KL	680	$\pm 10$	16	1	4.2	1100	0.7	1.2
SDR2207-821KL	820	$\pm 10$	16	1	3.9	1400	0.6	1.1
SDR2207-102KL	1000	$\pm 10$	15	1	3.5	1800	0.6	1.0

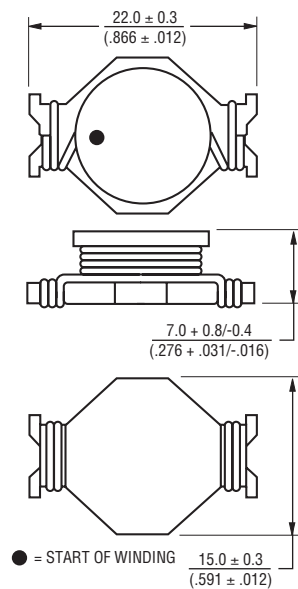
### General Specifications

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

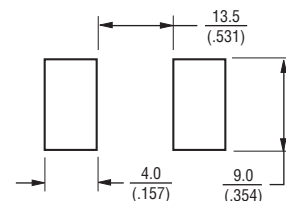
### Materials

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

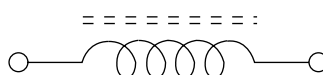
### Product Dimensions



### Recommended Layout



### Electrical Schematic



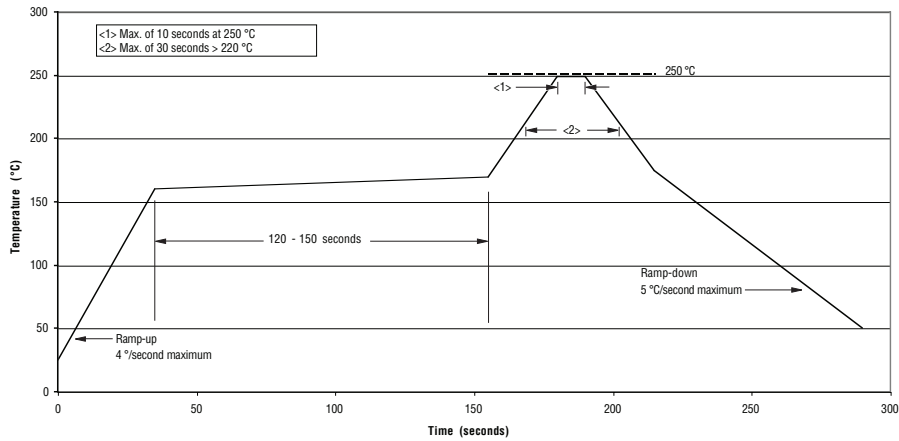
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

\*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. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

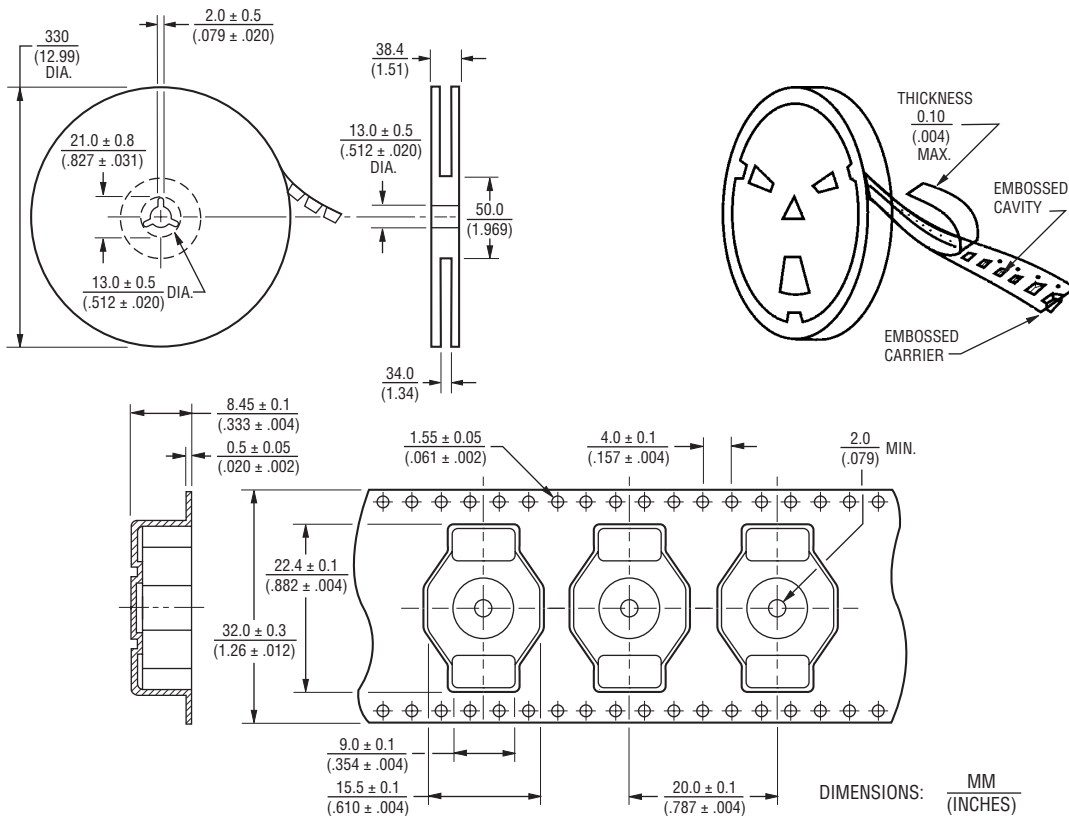
# SDR2207 Series - SMD Power Inductors

**BOURNS®**

## Soldering Profile



## Packaging Specifications



QTY: 250 PCS. PER REEL

REV. 03/18

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