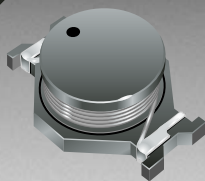


LEAD FREE  
VERSIONS ARE  
ROHS COMPLIANT



**BOURNS®**

## Features

- Available in E12 series
- Low height of only 7.0 mm
- Inductance as low as 0.8  $\mu\text{H}$
- High current up to 16 amps
- Lead free version available (see How to Order)
- Lead free versions are RoHS compliant\*

## Applications

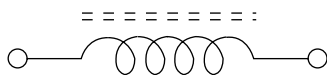
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communications equipment
  - Camcorders
  - LCD TVs
  - Car radios

# SDR2207 Series - SMD Power Inductors

## Electrical Specifications

Bourns Part No.	Inductance 100 KHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC (m $\Omega$ )	I rms Max. (A)	I sat Typ. (A)
	( $\mu\text{H}$ )	Tol. %						
SDR2207-R80M_	0.8	$\pm 20$	30	5	102.0	2.8	16.0	35.0
SDR2207-1R2M_	1.2	$\pm 20$	30	3	70.0	3.8	15.0	30.0
SDR2207-1R8M_	1.8	$\pm 20$	31	3	51.0	4.5	13.0	25.0
SDR2207-2R7M_	2.7	$\pm 20$	38	3	51.0	7.0	10.0	20.0
SDR2207-3R3M_	3.3	$\pm 20$	38	3	39.0	7.8	9.0	17.0
SDR2207-4R7M_	4.7	$\pm 20$	38	3	33.0	8.8	8.5	15.0
SDR2207-5R6M_	5.6	$\pm 20$	50	3	30.0	13.4	7.8	14.0
SDR2207-6R8M_	6.8	$\pm 20$	38	3	27.0	14.2	7.5	12.0
SDR2207-8R2M_	8.2	$\pm 20$	35	3	25.0	15.5	7.0	11.0
SDR2207-100M_	10	$\pm 20$	53	5	20.0	17.2	6.5	10.0
SDR2207-120Y_	12	$\pm 15$	50	5	19.0	23.6	5.5	9.5
SDR2207-150Y_	15	$\pm 15$	38	5	16.0	28.8	5.0	9.0
SDR2207-180Y_	18	$\pm 15$	46	5	15.0	33.0	4.6	8.0
SDR2207-220Y_	22	$\pm 15$	27	3	14.0	39.4	4.0	6.5
SDR2207-270Y_	27	$\pm 15$	22	3	12.0	43.5	3.8	6.0
SDR2207-330Y_	33	$\pm 15$	27	3	11.0	58.4	3.4	5.5
SDR2207-390K_	39	$\pm 10$	18	3	10.0	65.0	3.2	5.2
SDR2207-470K_	47	$\pm 10$	27	3	9.0	91.2	2.8	5.0
SDR2207-560K_	56	$\pm 10$	25	2	8.3	96.5	2.6	4.5
SDR2207-680K_	68	$\pm 10$	18	2	7.9	112.0	2.4	4.0
SDR2207-820K_	82	$\pm 10$	28	2	6.5	144.0	2.3	3.5
SDR2207-101K_	100	$\pm 10$	18	2	6.2	168.0	2.2	3.0
SDR2207-121K_	120	$\pm 10$	20	2	6.0	230.0	1.6	3.0
SDR2207-151K_	150	$\pm 10$	22	2	5.8	250.0	1.5	2.6
SDR2207-181K_	180	$\pm 10$	20	2	5.7	300.0	1.3	2.5
SDR2207-221K_	220	$\pm 10$	19	2	5.5	380.0	1.2	2.4
SDR2207-271K_	270	$\pm 10$	17	2	5.3	470.0	1.1	2.2
SDR2207-331K_	330	$\pm 10$	20	1	5.1	560.0	1.0	1.9
SDR2207-391K_	390	$\pm 10$	17	1	4.9	680.0	0.9	1.7
SDR2207-471K_	470	$\pm 10$	19	1	4.7	850.0	0.8	1.4
SDR2207-561K_	560	$\pm 10$	18	1	4.5	1000	0.8	1.3
SDR2207-681K_	680	$\pm 10$	16	1	4.2	1100	0.7	1.2
SDR2207-821K_	820	$\pm 10$	16	1	3.9	1400	0.6	1.1
SDR2207-102K_	1000	$\pm 10$	15	1	3.5	1800	0.6	1.0

## Electrical Schematic

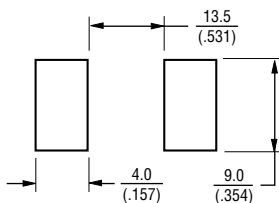


## How to Order

**SDR2207 - 100M**

Model \_\_\_\_\_  
 Value/Tolerance: from table \_\_\_\_\_  
 Termination \_\_\_\_\_  
 L = Cu/Sn  
 Blank = Cu/SnPb

## Recommended Layout



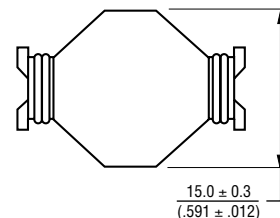
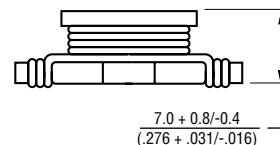
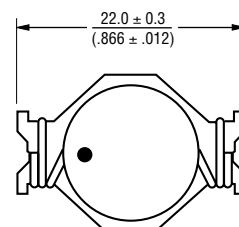
## General Specifications

Test Voltage .....0.1 V  
 Reflow Soldering.....230 °C; 10 sec. max.  
 Operating Temperature...-40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature .....-40 °C to +125 °C  
 Resistance to Soldering Heat .....230 °C for 10 sec.

## Materials

Core.....Ferrite DR  
 Wire .....Enameled copper  
 Terminal Electrode .....See How to Order  
 Base.....Phenolic T375J  
 Adhesive .....Epoxy resin  
 Rated Current .....Ind. drop 10 % typ. at Isat  
 Temperature Rise .....40 °C max. at rated I rms  
 Packaging .....250 pcs. per reel

## Product Dimensions



● = START OF WINDING

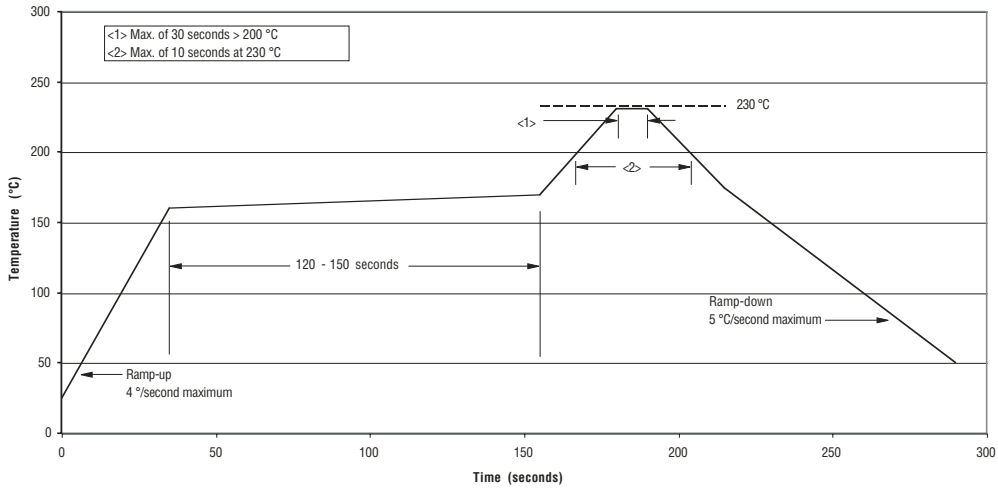
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications.

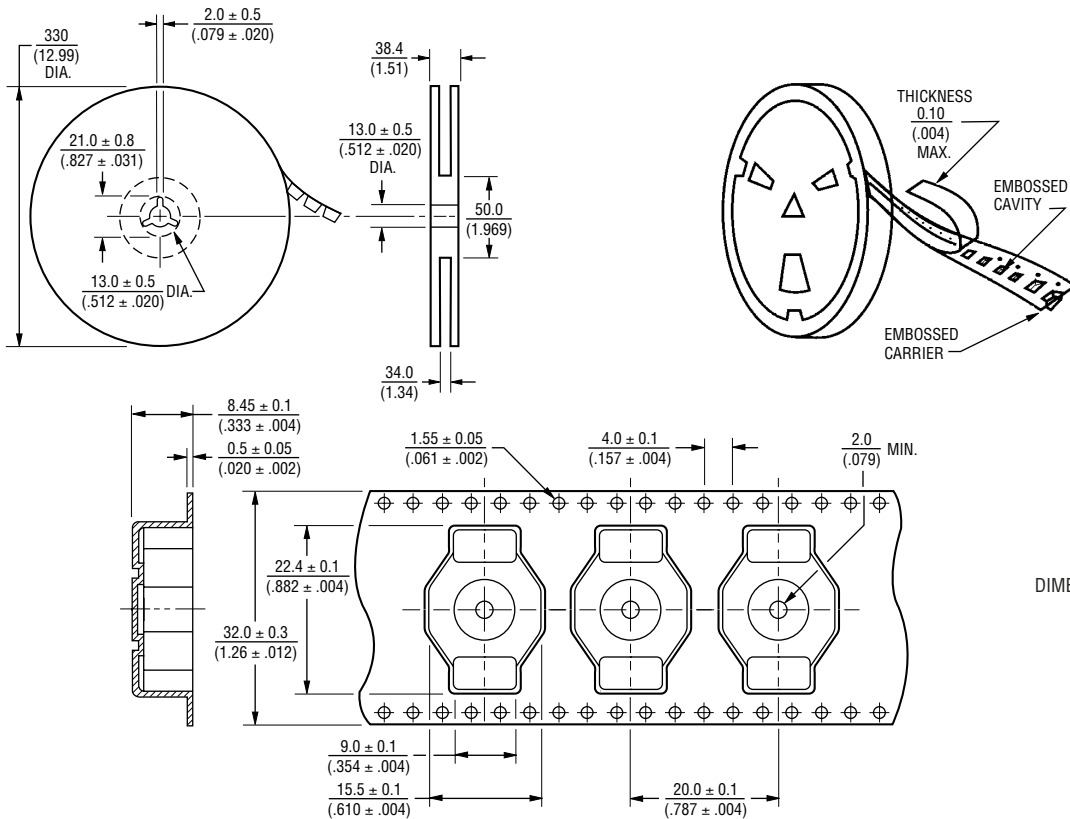
# SDR2207 Series - SMD Power Inductors

**BOURNS®**

## Soldering Profile



## Packaging Specifications



QTY: 250 PCS. PER REEL

REV. 02/05

Specifications are subject to change without notice.  
Customers should verify actual device performance in their specific applications.