

### 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\*

### Additional Information

Click these links for more information:



**BOURNS®**

## SDR2207 Series - SMD Power Inductors

### Electrical Specifications

Bourns Part Number	Inductance 100 kHz		Q Ref.	Test Frequency (MHz)	SRF Typ. (MHz)	RDC Max. (mΩ)	I rms Max. (A)	I sat Typ. (A)
	(μH)	Tol. %						
SDR2207-R78ML	0.78	± 20	50	7.96	95.0	2.6	15.0	30.0
SDR2207-R80ML	0.8	± 20	45	7.96	90.0	2.76	16.0	35.0
SDR2207-1R2ML	1.2	± 20	40	7.96	70.0	3.84	15.0	30.0
SDR2207-1R5ML	1.5	± 20	50	7.96	65.0	5.0	15.0	25.0
SDR2207-1R8ML	1.8	± 20	40	7.96	55.0	5.4	13.0	25.0
SDR2207-2R2ML	2.2	± 20	45	7.96	45.0	7.5	13.0	20.0
SDR2207-2R7ML	2.7	± 20	40	7.96	45.0	8.4	10.0	20.0
SDR2207-3R3ML	3.3	± 20	35	7.96	40.0	9.36	9.0	17.0
SDR2207-3R9ML	3.9	± 20	40	7.96	30.0	12.0	9.0	15.0
SDR2207-4R7ML	4.7	± 20	35	7.96	35.0	10.56	8.5	15.0
SDR2207-5R6ML	5.6	± 20	35	7.96	25.0	14.88	7.8	14.0
SDR2207-6R0ML	6.0	± 20	30	7.96	25.0	17.0	7.5	12.0
SDR2207-6R8ML	6.8	± 20	30	7.96	23.0	17.04	7.5	12.0
SDR2207-7R8ML	7.8	± 20	25	7.96	20.0	20.0	7.5	11.0
SDR2207-8R2ML	8.2	± 20	30	7.96	22.0	18.6	7.0	11.0
SDR2207-100ML	10	± 20	30	7.96	18.5	20.64	6.5	10.0
SDR2207-120YL	12	± 15	40	2.52	17.0	28.32	5.5	9.5
SDR2207-150YL	15	± 15	35	2.52	16.0	34.56	5.0	9.0
SDR2207-180YL	18	± 15	30	2.52	14.5	39.6	4.6	8.0
SDR2207-220YL	22	± 15	35	2.52	12.5	47.28	4.0	6.5
SDR2207-270YL	27	± 15	25	2.52	11.5	52.2	3.8	6.0
SDR2207-330YL	33	± 15	25	2.52	11.0	70.08	3.4	5.5
SDR2207-390KL	39	± 10	25	2.52	10.0	78.0	3.2	5.2
SDR2207-470KL	47	± 10	25	2.52	9.0	109.44	2.8	5.0
SDR2207-560KL	56	± 10	25	2.52	8.5	115.8	2.6	4.5
SDR2207-680KL	68	± 10	20	2.52	8.0	134.4	2.4	4.0
SDR2207-820KL	82	± 10	25	2.52	6.0	172.8	2.2	3.5
SDR2207-101KL	100	± 10	20	0.796	5.5	201.6	2.0	3.0
SDR2207-121KL	120	± 10	20	0.1	5.0	230.0	1.6	3.0
SDR2207-151KL	150	± 10	19	0.1	4.87	250.0	1.5	2.6
SDR2207-181KL	180	± 10	17	0.1	4.65	300.0	1.3	2.5
SDR2207-221KL	220	± 10	19	0.1	3.97	380.0	1.2	2.4
SDR2207-271KL	270	± 10	22	0.1	3.37	470.0	1.1	2.2
SDR2207-331KL	330	± 10	20	0.1	3.15	560.0	1.0	1.9
SDR2207-391KL	390	± 10	21	0.1	3.00	680.0	0.9	1.7
SDR2207-471KL	470	± 10	25	0.1	2.55	850.0	0.8	1.4
SDR2207-561KL	560	± 10	23	0.1	2.40	1000.0	0.78	1.3
SDR2207-681KL	680	± 10	25	0.1	2.50	1100.0	0.72	1.2
SDR2207-821KL	820	± 10	25	0.1	1.97	1400.0	0.64	1.1
SDR2207-102KL	1000	± 10	25	0.1	1.60	1800.0	0.56	1.0

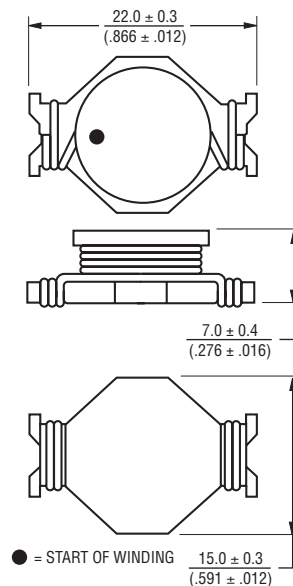
### General Specifications

Test Voltage ..... 0.1 V  
 Operating Temperature ..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature.. -40 °C to +125 °C  
 Moisture Sensitivity Level..... 1  
 ESD Classification (HBM).....N/A

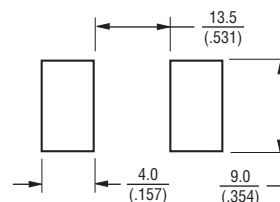
### Materials

Core ..... Ferrite DR  
 Wire ..... Enamelled copper  
 Base ..... Phenolic T375J  
 Terminal Finish ..... SnAgCu  
 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



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



**CALIFORNIA WARNING:** Can expose you to lead, a carcinogen and reproductive toxicant.  
 See [www.P65Warnings.ca.gov](http://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.  
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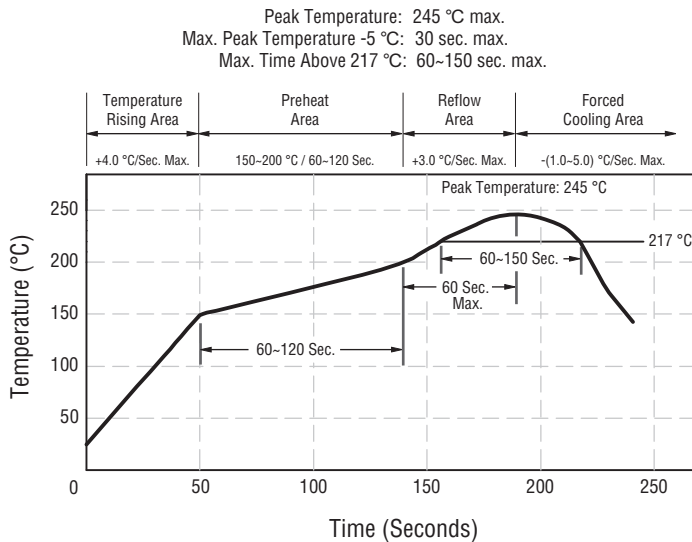
## Applications

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

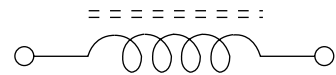
## SDR2207 Series - SMD Power Inductors

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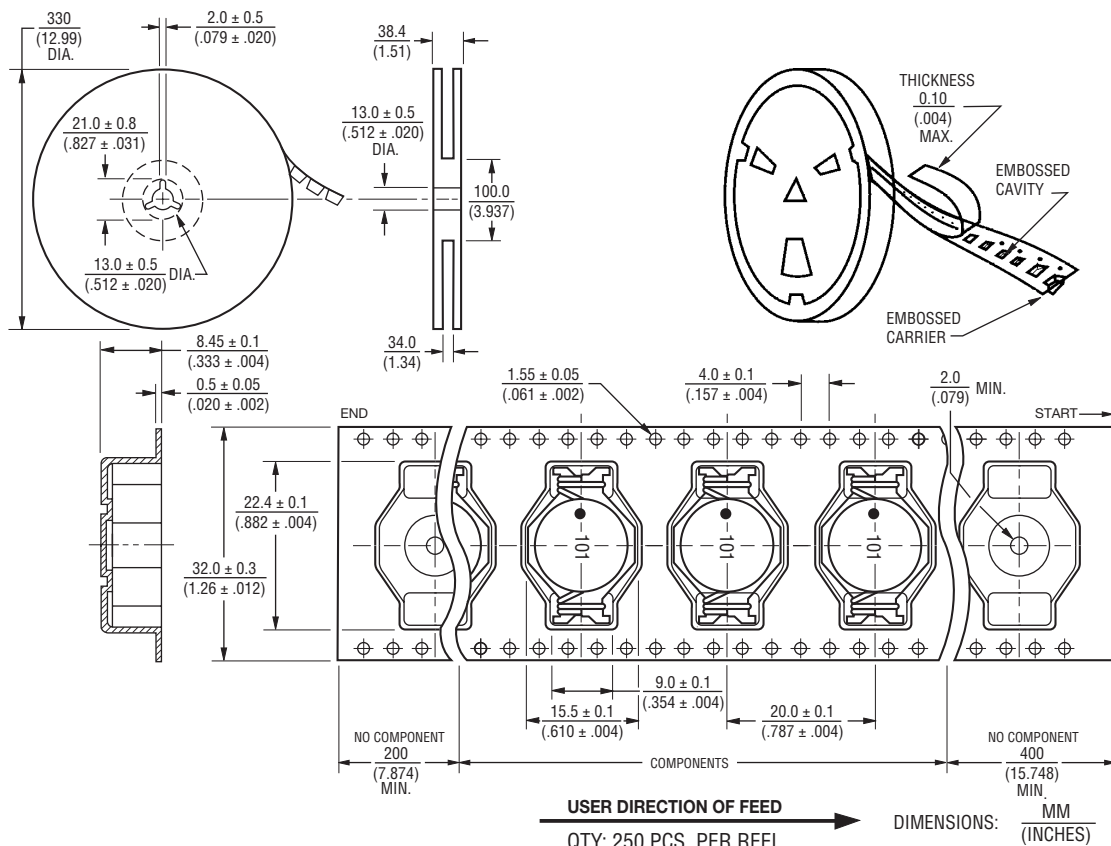
### Soldering Profile



### Electrical Schematic



### Packaging Specifications



REV. 02/26

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