



## Features

- Available in E12 series
- Small design of only 7.8 mm max. diameter
- RoHS compliant\*

## Applications

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

# SDR0805 Series - SMD Power Inductors

### Electrical Specifications

Bourns Part Number	Inductance 1 kHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC Max. (Ω)	I rms Max. (A)	I sat Typ. (A)
	(μH)	Tol. %						
SDR0805-1R5ML	1.5	± 20	32	7.96	120	0.015	7.200	10.500
SDR0805-2R5ML	2.5	± 20	32	7.96	70	0.020	5.900	8.200
SDR0805-3R3ML	3.3	± 20	32	7.96	55	0.022	5.600	7.300
SDR0805-3R9ML	3.9	± 20	32	7.96	45	0.024	5.200	6.500
SDR0805-4R7ML	4.7	± 20	31	7.96	38	0.033	4.200	6.000
SDR0805-5R6ML	5.6	± 20	31	7.96	34	0.035	4.000	5.500
SDR0805-6R8ML	6.8	± 20	30	7.96	33	0.040	3.600	4.800
SDR0805-7R5ML	7.5	± 20	30	7.96	31	0.045	3.500	4.500
SDR0805-8R2ML	8.2	± 20	29	7.96	30	0.050	3.400	4.300
SDR0805-100ML	10	± 20	25	2.52	22	0.070	3.000	4.000
SDR0805-120ML	12	± 20	25	2.52	20	0.080	2.750	3.700
SDR0805-150ML	15	± 20	25	2.52	16	0.090	2.600	3.200
SDR0805-180ML	18	± 20	20	2.52	15	0.100	2.500	3.000
SDR0805-220ML	22	± 20	20	2.52	13	0.110	2.300	2.700
SDR0805-270KL	27	± 20	20	2.52	12	0.120	2.200	2.500
SDR0805-330KL	33	± 10	15	2.52	10	0.140	2.000	2.200
SDR0805-390KL	39	± 10	15	2.52	10	0.160	1.900	2.000
SDR0805-470KL	47	± 10	15	2.52	9	0.200	1.650	1.900
SDR0805-560KL	56	± 10	15	2.52	9	0.240	1.500	1.700
SDR0805-680KL	68	± 10	15	2.52	8	0.300	1.350	1.500
SDR0805-820KL	82	± 10	12	2.52	7	0.370	1.250	1.400
SDR0805-101KL	100	± 10	12	0.796	7	0.450	1.050	1.250
SDR0805-121KL	120	± 10	12	0.796	6	0.480	1.000	1.150
SDR0805-151KL	150	± 10	12	0.796	6	0.680	0.850	1.000
SDR0805-181KL	180	± 10	12	0.796	5	0.770	0.700	0.900
SDR0805-221KL	220	± 10	12	0.796	5	0.960	0.630	0.850
SDR0805-271KL	270	± 10	12	0.796	5	1.110	0.600	0.750
SDR0805-331KL	330	± 10	12	0.796	4	1.260	0.560	0.700
SDR0805-391KL	390	± 10	12	0.796	4	1.770	0.500	0.650
SDR0805-471KL	470	± 10	12	0.796	4	1.960	0.480	0.600
SDR0805-561KL	560	± 10	30	0.796	4	2.500	0.420	0.550
SDR0805-681KL	680	± 10	29	0.796	3	2.800	0.380	0.480
SDR0805-821KL	820	± 10	28	0.796	3	4.000	0.320	0.450
SDR0805-102KL	1000	± 10	27	0.252	3	4.500	0.300	0.400
SDR0805-122KL	1200	± 10	28	0.252	2	6.800	0.230	0.370
SDR0805-152KL	1500	± 10	27	0.252	2	8.000	0.220	0.330
SDR0805-182KL	1800	± 10	30	0.252	2	9.200	0.210	0.300
SDR0805-222KL	2200	± 10	29	0.252	2	10.000	0.200	0.270
SDR0805-272KL	2700	± 10	31	0.252	1	11.800	0.190	0.250
SDR0805-332KL	3300	± 10	28	0.252	1	16.500	0.170	0.220
SDR0805-392KL	3900	± 10	28	0.252	1	18.000	0.160	0.210
SDR0805-472KL	4700	± 10	30	0.252	1	21.000	0.150	0.190

### Additional Information

Click these links for more information:



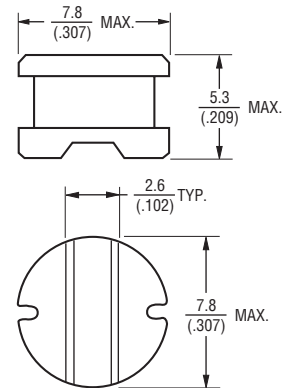
### General Specifications

Test Frequency ..... 1 KHz  
 Test Voltage ..... 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

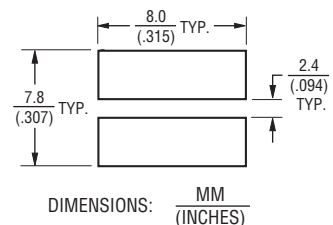
### Materials

Core ..... Ferrite DR  
 Wire ..... Enameled copper  
 Base ..... DAP  
 Terminal Finish ..... SnAgCu  
 Rated Current .. Ind. drop 10 % typ. at Isat  
 Temp. Rise ..... 40 °C typ. at rated I rms  
 Packaging ..... 1000 pcs. per reel

### Product Dimensions



### Recommended Layout



\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Specifications are subject to change without notice.

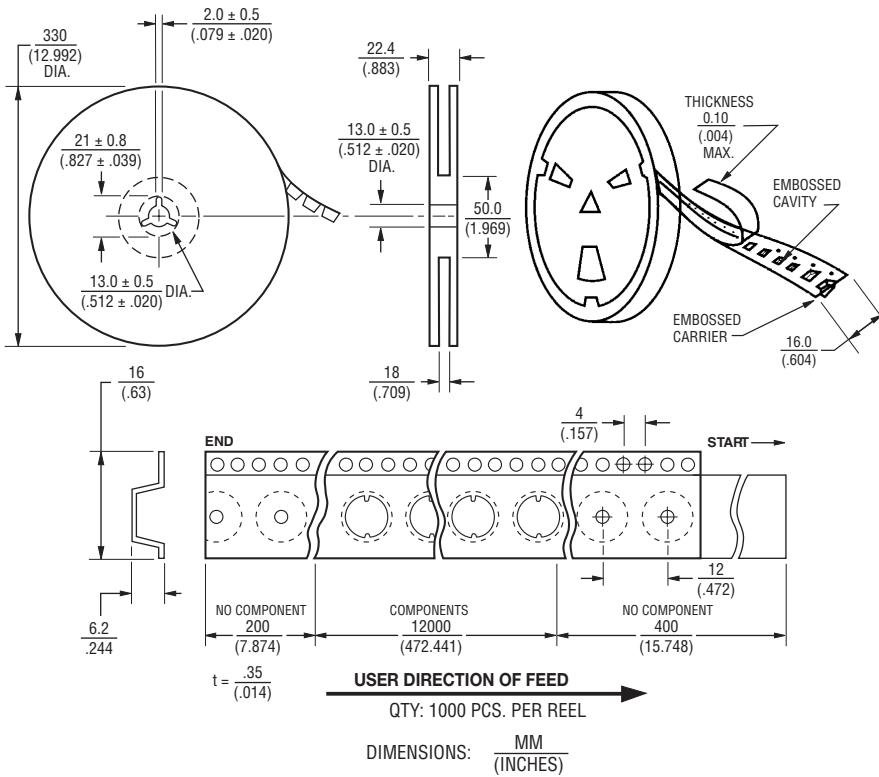
Users should verify actual device performance in their specific applications.

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# SDR0805 Series - SMD Power Inductors

**BOURNS®**

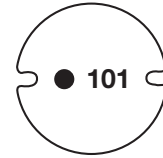
## Packaging Specifications



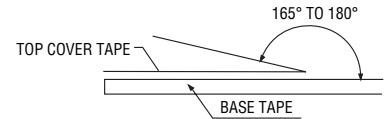
## Materials

Paper  
Plastics

## Typical Part Marking



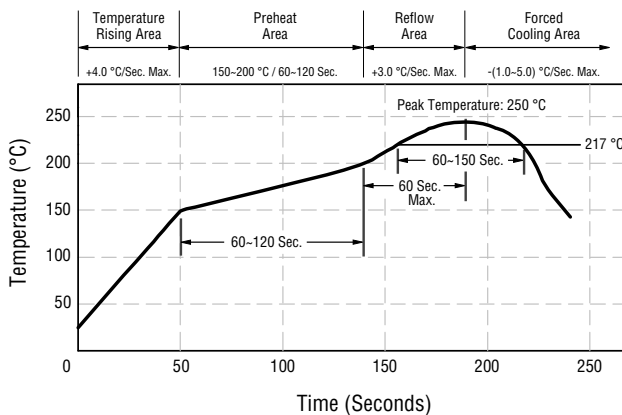
## Strength of Cover Tape



The force for tearing off cover tape is 10 to 130 grams in the arrow direction.

## Soldering Profile

Peak Temperature: 250 °C max.  
Max. Peak Temperature -5 °C: 30 sec. max.  
Max. Time Above 217 °C: 60-150 sec. max.



REV. 05/26

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