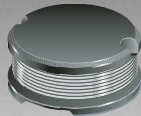


LEAD FREE  
VERSIONS ARE  
ROHS COMPLIANT



**BOURNS®**

## Features

- Available in E12 series
- Small design of only 7.8 mm maximum diameter
- 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
  - CD-players
  - Car radios

# SDR0805 Series - SMD Power Inductors

### Electrical Specifications

Bourns Part No.	Inductance 1kHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC (Ω)	I rms Max. (A)	I sat Typ. (A)
	(μH)	Tol. %						
SDR0805-1R5M	1.5	± 20	32	7.96	120	0.02	6.00	9.10
SDR0805-2R5M	2.5	± 20	32	7.96	70	0.02	5.00	7.20
SDR0805-3R3M	3.3	± 20	32	7.96	55	0.02	4.50	6.30
SDR0805-3R9M	3.9	± 20	32	7.96	45	0.02	4.40	5.70
SDR0805-4R7M	4.7	± 20	31	7.96	38	0.03	3.70	5.00
SDR0805-5R6M	5.6	± 20	31	7.96	34	0.04	3.50	4.60
SDR0805-6R8M	6.8	± 20	30	7.96	33	0.04	3.20	4.10
SDR0805-7R5M	7.5	± 20	29	7.96	30	0.05	2.80	3.70
SDR0805-100M	10	± 20	25	2.52	22	0.07	2.30	3.20
SDR0805-120M	12	± 20	25	2.52	20	0.08	2.00	3.00
SDR0805-150M	15	± 20	25	2.52	16	0.09	1.80	2.70
SDR0805-180M	18	± 20	20	2.52	15	0.10	1.60	2.60
SDR0805-220M	22	± 20	20	2.52	13	0.11	1.50	2.30
SDR0805-270K	27	± 20	20	2.52	12	0.12	1.30	2.10
SDR0805-330K	33	± 10	15	2.52	10	0.14	1.20	1.90
SDR0805-390K	39	± 10	15	2.52	10	0.16	1.10	1.70
SDR0805-470K	47	± 10	15	2.52	9	0.20	1.00	1.60
SDR0805-560K	56	± 10	15	2.52	9	0.24	0.94	1.50
SDR0805-680K	68	± 10	15	2.52	8	0.30	0.85	1.30
SDR0805-820K	82	± 10	12	2.52	7	0.37	0.78	1.20
SDR0805-101K	100	± 10	12	0.796	7	0.45	0.72	1.10
SDR0805-121K	120	± 10	12	0.796	6	0.48	0.66	1.00
SDR0805-151K	150	± 10	12	0.796	6	0.68	0.58	0.85
SDR0805-181K	180	± 10	12	0.796	5	0.77	0.51	0.80
SDR0805-221K	220	± 10	12	0.796	5	0.96	0.49	0.80
SDR0805-271K	270	± 10	12	0.796	5	1.11	0.42	0.66
SDR0805-331K	330	± 10	12	0.796	4	1.26	0.40	0.58
SDR0805-391K	390	± 10	12	0.796	4	1.77	0.36	0.55
SDR0805-471K	470	± 10	12	0.796	4	1.96	0.34	0.50
SDR0805-561K	560	± 10	30	0.796	4	2.50	0.30	0.46
SDR0805-681K	680	± 10	29	0.796	3	2.80	0.28	0.42
SDR0805-821K	820	± 10	28	0.796	3	4.00	0.23	0.35
SDR0805-102K	1000	± 10	27	0.252	3	4.50	0.21	0.34
SDR0805-122K	1200	± 10	28	0.252	2	6.80	0.17	0.28
SDR0805-152K	1500	± 10	27	0.252	2	8.00	0.15	0.26
SDR0805-182K	1800	± 10	30	0.252	2	9.20	0.14	0.23
SDR0805-222K	2200	± 10	29	0.252	2	10.00	0.13	0.20
SDR0805-272K	2700	± 10	31	0.252	1	11.80	0.12	0.18
SDR0805-332K	3300	± 10	28	0.252	1	16.50	0.10	0.17
SDR0805-392K	3900	± 10	28	0.252	1	18.00	0.09	0.16
SDR0805-472K	4700	± 10	30	0.252	1	21.00	0.08	0.15

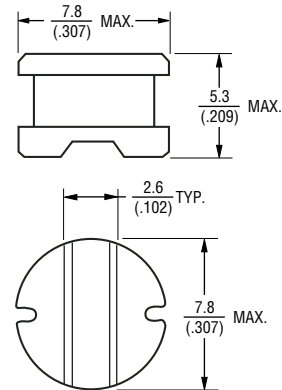
### General Specifications

Test Frequency.....1 KHz  
 Test Voltage .....1 V  
 Reflow Soldering.....230 °C, 50 sec. max.  
 Operating Temperature ..-40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature ..-40 °C to +125 °C  
 Resistance to Soldering Heat  
 .....260 °C for 5 sec.

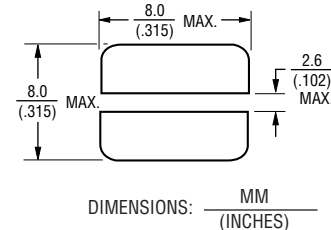
### Materials

Core.....Ferrite DR core  
 Wire.....Enamelled copper wire  
 Terminal Electrode .....See How to Order  
 Rated Current  
 .....Ind. drop 10 % typ. at Isat  
 Temperature Rise  
 .....40°C max. at rated I rms  
 Packaging.....1000 pcs. per reel

### Product Dimensions

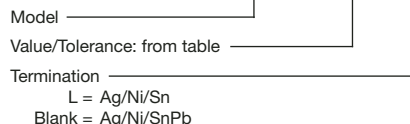


### Recommended Layout

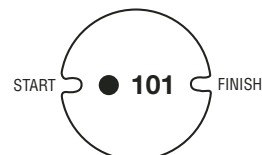


### How to Order

**SDR0805 - 100M**



### Typical Part Marking



\*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.

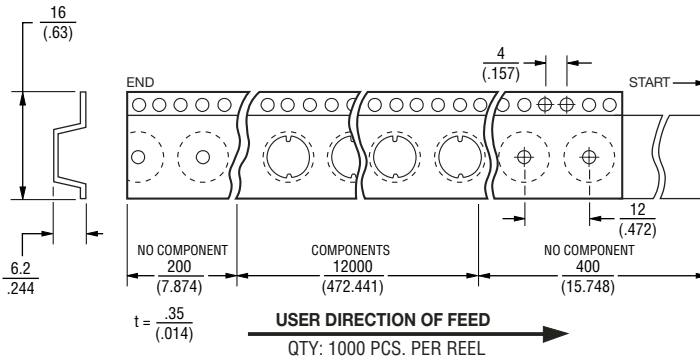
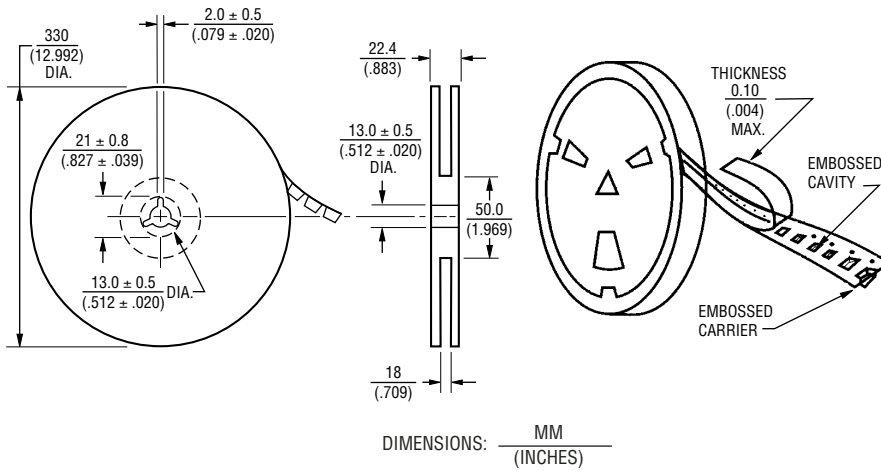
# SDR0805 Series - SMD Power Inductors

**BOURNS®**

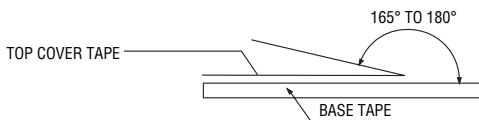
## Packaging Specifications

## Materials

Paper  
Plastics



## Strength Of Cover Tape



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