



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:



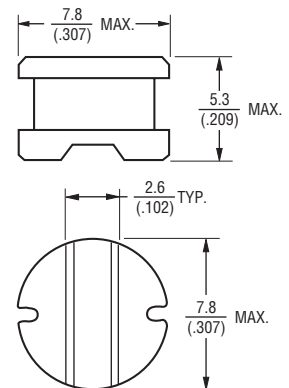
General Specifications

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

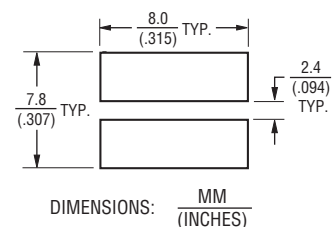
Materials

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 Irms
 Packaging 1000 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

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

Specifications are subject to change without notice.

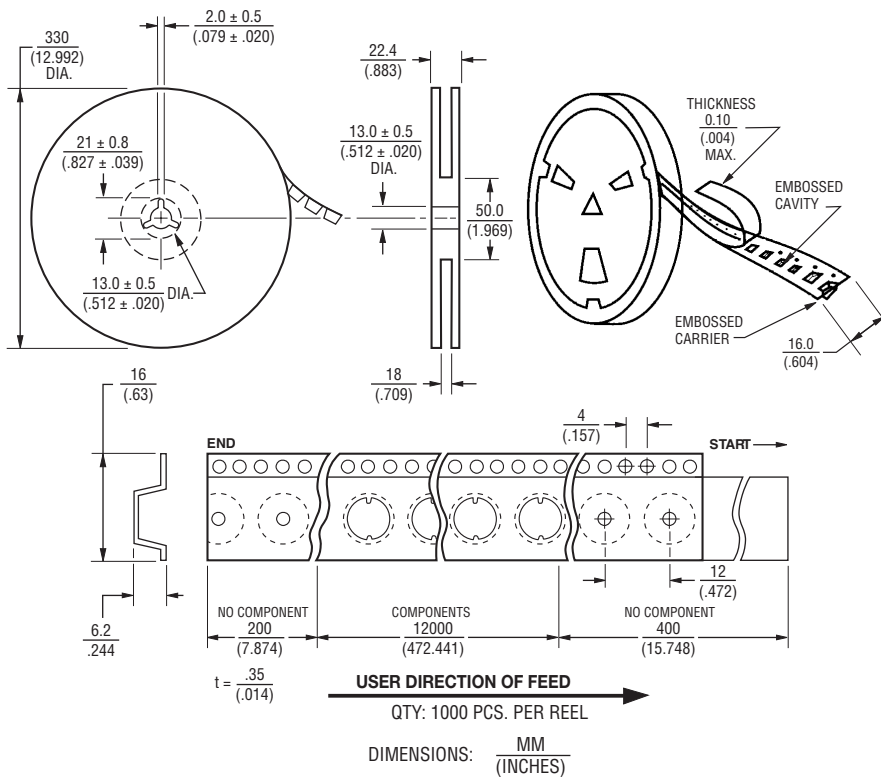
Users should verify actual device performance in their specific applications.

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SDR0805 Series - SMD Power Inductors

BOURNS®

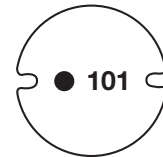
Packaging Specifications



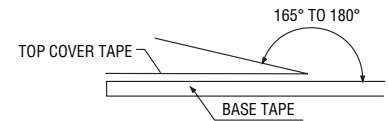
Materials

Paper
Plastics

Typical Part Marking



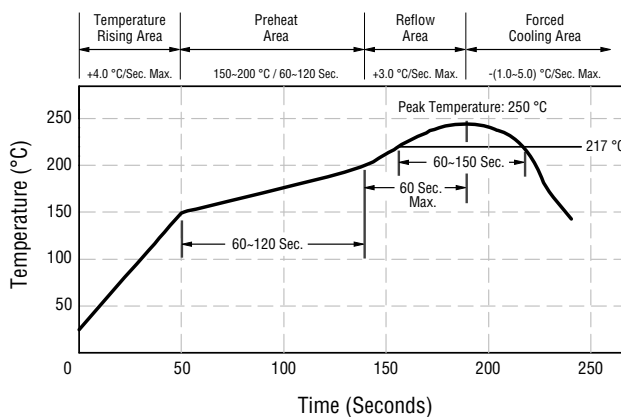
Strength of Cover Tape



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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