



## Features

- Available in E12 series
- Small design of only 9.8 mm maximum diameter
- RoHS compliant\*

## Applications

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

# SDR1006 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. %						
SDR1006-1R5ML	1.5	± 20	35	7.96	105	0.018	6.40	10.00
SDR1006-2R2ML	2.2	± 20	35	7.96	68	0.021	5.40	10.00
SDR1006-3R3ML	3.3	± 20	34	7.96	55	0.024	5.00	10.00
SDR1006-3R9ML	3.9	± 20	34	7.96	48	0.027	4.60	8.40
SDR1006-4R7ML	4.7	± 20	33	7.96	40	0.036	4.00	7.30
SDR1006-5R6ML	5.6	± 20	33	7.96	35	0.040	3.80	6.40
SDR1006-6R8ML	6.8	± 20	33	7.96	32	0.044	3.40	5.90
SDR1006-8R2ML	8.2	± 20	31	7.96	24	0.048	3.00	5.40
SDR1006-100ML	10	± 20	30	2.52	21	0.060	2.60	5.10
SDR1006-120ML	12	± 20	30	2.52	20	0.070	2.45	4.50
SDR1006-150ML	15	± 20	30	2.52	16	0.080	2.25	4.00
SDR1006-180ML	18	± 20	30	2.52	15	0.090	2.15	3.80
SDR1006-220ML	22	± 20	25	2.52	13	0.10	1.95	3.50
SDR1006-270KL	27	± 10	25	2.52	11	0.11	1.75	3.40
SDR1006-330KL	33	± 10	25	2.52	10	0.12	1.50	2.90
SDR1006-390KL	39	± 10	20	2.52	9.0	0.14	1.35	2.60
SDR1006-470KL	47	± 10	20	2.52	8.0	0.17	1.25	2.30
SDR1006-560KL	56	± 10	20	2.52	7.5	0.19	1.15	2.10
SDR1006-680KL	68	± 10	15	2.52	7.0	0.22	1.10	2.00
SDR1006-820KL	82	± 10	15	2.52	6.0	0.25	1.00	1.90
SDR1006-101KL	100	± 10	15	0.796	5.2	0.35	0.97	1.70
SDR1006-121KL	120	± 10	15	0.796	5.0	0.40	0.89	1.50
SDR1006-151KL	150	± 10	15	0.796	4.5	0.47	0.78	1.40
SDR1006-181KL	180	± 10	12	0.796	4.0	0.63	0.72	1.30
SDR1006-221KL	220	± 10	12	0.796	3.8	0.73	0.66	1.10
SDR1006-271KL	270	± 10	12	0.796	3.5	0.97	0.57	1.00
SDR1006-331KL	330	± 10	12	0.796	3.2	1.15	0.52	0.85
SDR1006-391KL	390	± 10	12	0.796	3.0	1.30	0.48	0.80
SDR1006-471KL	470	± 10	12	0.796	2.5	1.48	0.42	0.80
SDR1006-561KL	560	± 10	12	0.796	2.3	1.90	0.33	0.66
SDR1006-681KL	680	± 10	12	0.796	2.1	2.25	0.28	0.65
SDR1006-821KL	820	± 10	10	0.796	2.0	2.55	0.24	0.56
SDR1006-102KL	1000	± 10	30	0.252	1.9	3.10	0.23	0.53
SDR1006-122KL	1200	± 10	31	0.252	1.8	4.20	0.21	0.48
SDR1006-152KL	1500	± 10	31	0.252	1.7	5.00	0.19	0.45
SDR1006-182KL	1800	± 10	31	0.252	1.6	6.80	0.17	0.38
SDR1006-222KL	2200	± 10	31	0.252	1.5	7.60	0.16	0.36
SDR1006-222KL	2200	± 10	31	0.252	1.5	7.60	0.16	0.36
SDR1006-272KL	2700	± 10	32	0.252	1.4	11.60	0.14	0.33
SDR1006-332KL	3300	± 10	32	0.252	1.3	13.50	0.12	0.30
SDR1006-392KL	3900	± 10	32	0.252	1.2	14.80	0.11	0.28
SDR1006-472KL	4700	± 10	32	0.252	0.8	18.00	0.10	0.24

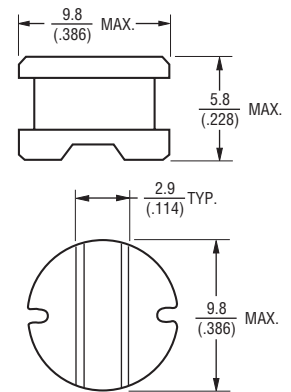
## General Specifications

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.  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM)..... N/A

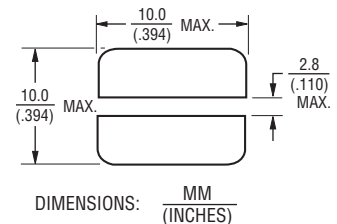
## Materials

Core ..... Ferrite DR core  
 Wire ..... Enameled copper wire  
 Base ..... DAP  
 Terminal ..... Ag/Ni/Sn  
 Rated Current  
 ..... Ind. drop 10 % typ. at Isat  
 Temperature Rise  
 ..... 40 °C max. at rated I rms  
 Packaging ..... 800 pcs. per reel

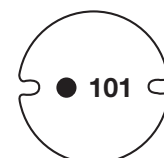
## Product Dimensions



## Recommended Layout



## Typical Part Marking

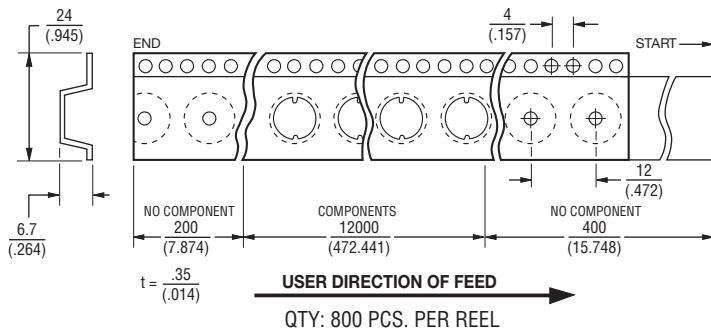
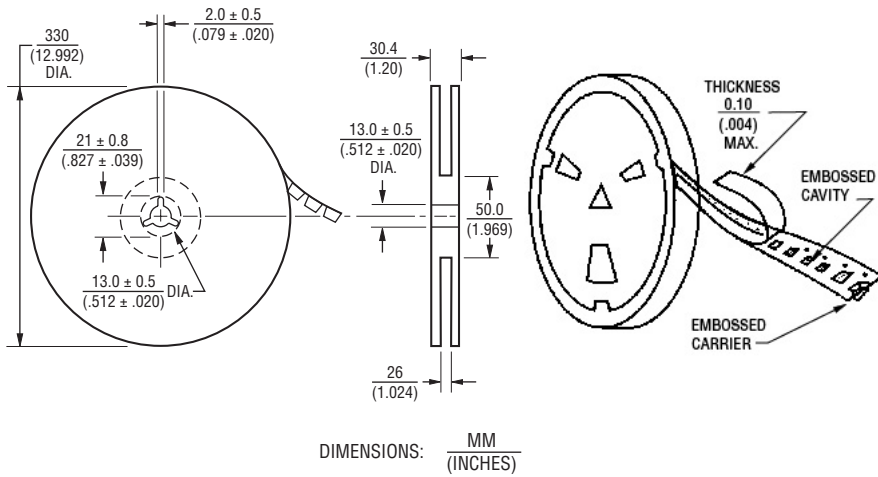


\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
 Specifications are subject to change without notice.  
 The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.  
 Users should verify actual device performance in their specific applications.

# SDR1006 Series - SMD Power Inductors

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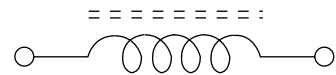
## Packaging Specifications



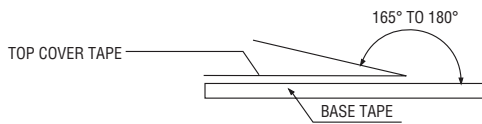
## Materials

Paper  
Plastics

## Electrical Schematic



## Strength Of Cover Tape



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

REV. 03/18

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