THE DATASHEET OF

SDR1006-821KL

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

BOURNS®

SDR1006 Series - SMD Power Inductors

Electrical Specifications

Bourns Part Number	Inductance 1 kHz (µH)	Inductance 1 kHz Tol. %	Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC Max. (Ω)	I rms Max. (A)	I sat Typ. (A)
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

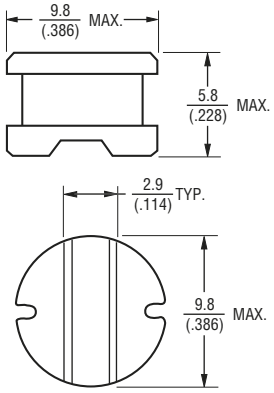
General Specifications

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

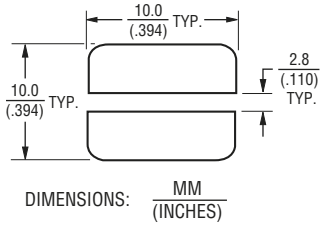
Materials

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 Irms
Packaging ..... 800 pcs. per reel

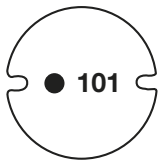
Product Dimensions



Recommended Layout



Typical Part Marking



WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

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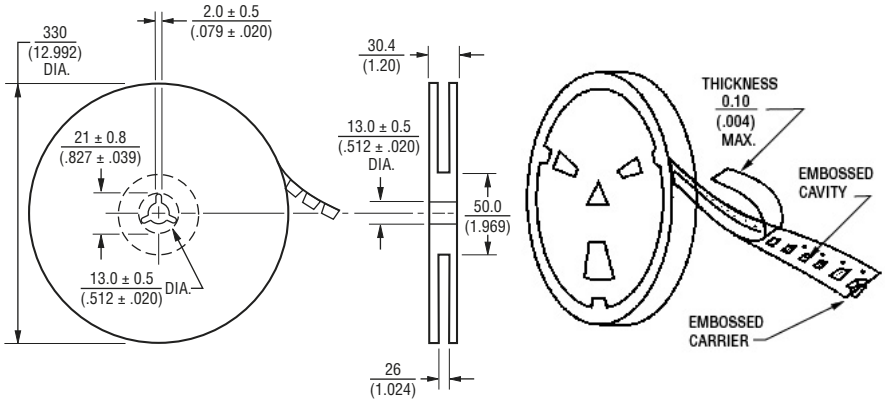
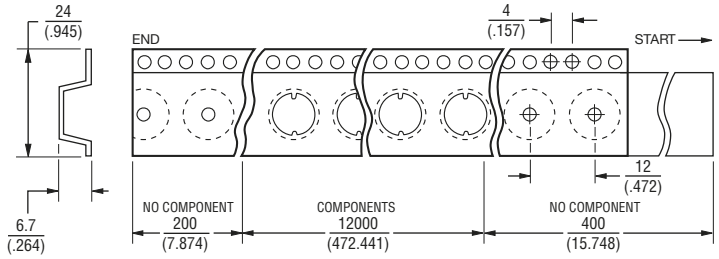
Packaging Specifications



DIMENSIONS: MM / (INCHES)

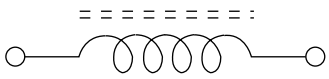


QTY: 800 PCS. PER REEL

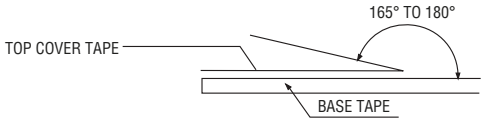
Materials

Paper
Plastics

Electrical Schematic



Strength Of Cover Tape



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

BOURNS®

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REV. 04/18

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