



Features

- Available in E12 series
- Small design of only 13 mm maximum diameter
- RoHS compliant*

Applications

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

SDR1307 Series - SMD Power Inductors

Electrical Specifications

Bourns Part No.	Inductance 100 kHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC Max. (mΩ)	I rms Max. (A)	I sat Typ. (A)
	(μH)	Tol. %						
SDR1307-1R5ML	1.5	± 20	20	7.96	65.0	5.0	9.50	20.00
SDR1307-2R2ML	2.2	± 20	22	7.96	50.0	6.0	9.00	18.00
SDR1307-2R7ML	2.7	± 20	24	7.96	40.0	8.0	8.20	16.00
SDR1307-3R3ML	3.3	± 20	26	7.96	38.0	8.7	7.50	15.00
SDR1307-4R7ML	4.7	± 20	25	7.96	36.0	10.0	7.00	13.00
SDR1307-5R6ML	5.6	± 20	24	7.96	28.0	15.0	6.50	11.00
SDR1307-6R8ML	6.8	± 20	24	7.96	26.0	17.0	6.00	10.50
SDR1307-8R2ML	8.2	± 20	24	7.96	24.0	19.0	5.80	9.80
SDR1307-100ML	10	± 20	22	2.52	22.0	21.0	5.60	9.20
SDR1307-120ML	12	± 20	25	2.52	20.0	30.0	4.80	8.00
SDR1307-150ML	15	± 20	28	2.52	17.0	34.0	4.50	7.50
SDR1307-180ML	18	± 20	28	2.52	16.0	36.0	4.20	7.00
SDR1307-220ML	22	± 20	40	2.52	15.0	47.0	3.60	6.50
SDR1307-270ML	27	± 20	35	2.52	11.0	60.0	3.30	5.50
SDR1307-330KL	33	± 10	35	2.52	10.0	65.0	3.10	5.00
SDR1307-390KL	39	± 10	28	2.52	9.0	75.0	2.90	4.60
SDR1307-470KL	47	± 10	24	2.52	7.5	82.0	2.70	4.20
SDR1307-560KL	56	± 10	22	2.52	7.2	95.0	2.50	3.80
SDR1307-680KL	68	± 10	24	2.52	7.0	120.0	2.30	3.50
SDR1307-820KL	82	± 10	18	2.52	6.0	140.0	2.10	3.20
SDR1307-101KL	100	± 10	25	0.796	5.8	180.0	1.90	3.00
SDR1307-121KL	120	± 10	20	0.796	5.5	210.0	1.80	2.80
SDR1307-151KL	150	± 10	20	0.796	4.5	250.0	1.60	2.60
SDR1307-181KL	180	± 10	18	0.796	4.0	280.0	1.50	2.30
SDR1307-221KL	220	± 10	15	0.796	3.8	360.0	1.30	2.10
SDR1307-271KL	270	± 10	15	0.796	3.5	410.0	1.20	1.80
SDR1307-331KL	330	± 10	15	0.796	3.2	520.0	1.10	1.60
SDR1307-391KL	390	± 10	12	0.796	2.5	600.0	1.00	1.50
SDR1307-471KL	470	± 10	12	0.796	2.2	720.0	0.90	1.40
SDR1307-561KL	560	± 10	10	0.796	2.0	880.0	0.85	1.30
SDR1307-681KL	680	± 10	10	0.796	1.6	1000.0	0.80	1.20
SDR1307-821KL	820	± 10	10	0.796	1.5	1300.0	0.75	1.10
SDR1307-102KL	1000	± 10	10	0.252	1.4	1600.0	0.65	1.00

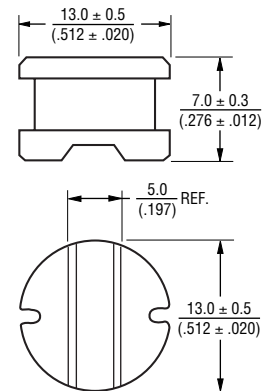
General Specifications

Test Voltage.....0.1 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

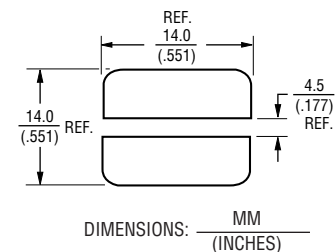
Materials

CoreFerrite DR core
 WireEnamelled copper wire
 Terminal.....Ag/Ni/Sn
 Rated Current
Ind. drop 10 % typ. at Isat
 Temperature Rise
40 °C max. at rated I rms
 Packaging.....400 pcs. per reel

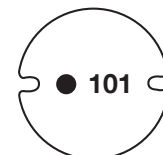
Product Dimensions



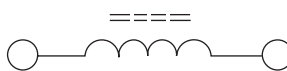
Recommended Layout



Typical Part Marking



Electrical Schematic



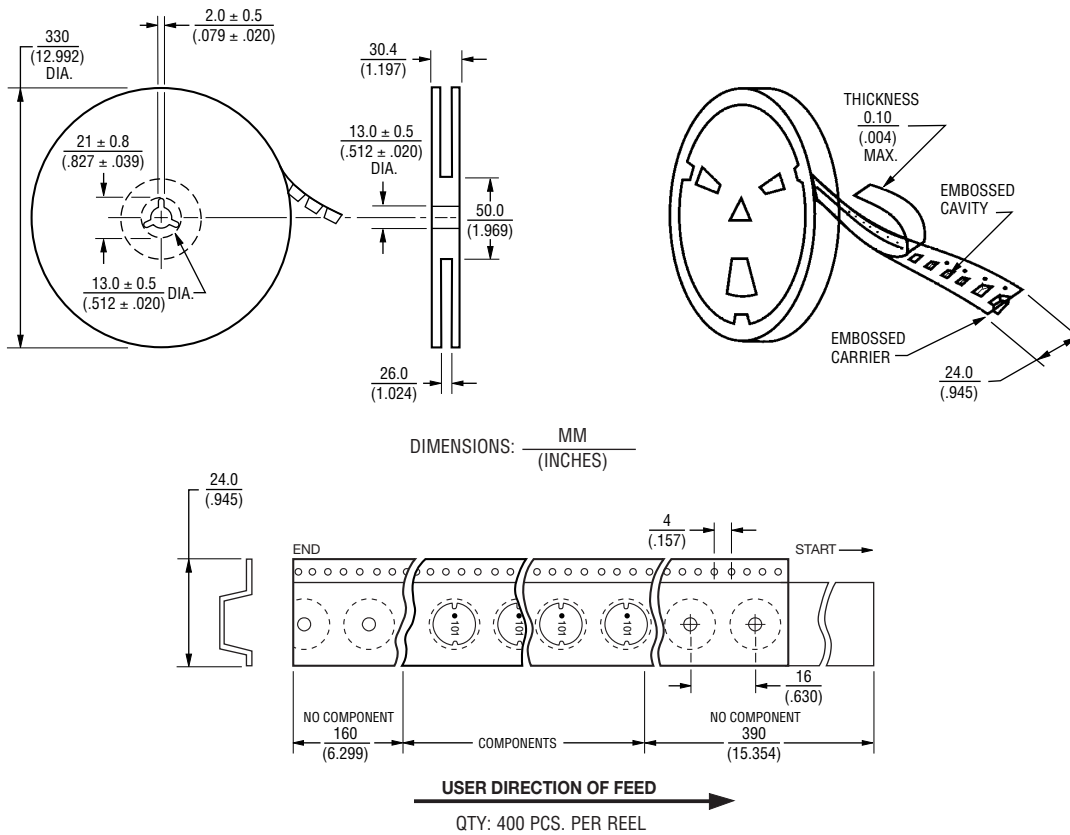
*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
 Specifications are subject to change without notice.

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.

SDR1307 Series - SMD Power Inductors

BOURNS®

Packaging Specifications



REV. 05, - 4

Rpbop pel ria sbotcv ^`qr^i absf`b mboclo j ^k`b fk qebfo pmb`fcf` ^mmif`^qfllkp`

Specifications are subject to change without notice.

Qeb absf`b `e^e^ qbofpgf`p ^ka m^e^ j bjbop fk qefp a^q^ pebbq `^k ^ka a l s^ov fk afocbobbq ^mmif`^qfllkp ^ka ^`qr^i absf`b mboclo j ^k`b j ^v s^ov l sbo qf j b`