



Features

- Available in E12 series
- Small design of only 13 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

SDR1307 Series - SMD Power Inductors

Electrical Specifications

Bourns Part No.	Inductance 100 kHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC (mΩ)	I rms Max. (A)	I sat Typ. (A)
	(μH)	Tol. %						
SDR1307-1R5M	1.5	± 20	20	7.96	65.0	5.0	9.50	20.00
SDR1307-2R2M	2.2	± 20	22	7.96	50.0	6.0	9.00	18.00
SDR1307-2R7M	2.7	± 20	24	7.96	40.0	8.0	8.20	16.00
SDR1307-3R3M	3.3	± 20	26	7.96	38.0	8.7	7.50	15.00
SDR1307-4R7M	4.7	± 20	25	7.96	36.0	10.0	7.00	13.00
SDR1307-5R6M	5.6	± 20	24	7.96	28.0	15.0	6.50	11.00
SDR1307-6R8M	6.8	± 20	24	7.96	26.0	17.0	6.00	10.50
SDR1307-8R2M	8.2	± 20	24	7.96	24.0	19.0	5.80	9.80
SDR1307-100M	10	± 20	22	2.52	22.0	21.0	5.60	9.20
SDR1307-120M	12	± 20	25	2.52	20.0	30.0	4.80	8.00
SDR1307-150M	15	± 20	28	2.52	17.0	34.0	4.50	7.50
SDR1307-180M	18	± 20	28	2.52	16.0	36.0	4.20	7.00
SDR1307-220M	22	± 20	40	2.52	15.0	47.0	3.60	6.50
SDR1307-270M	27	± 20	35	2.52	11.0	60.0	3.30	5.50
SDR1307-330K	33	± 10	35	2.52	10.0	65.0	3.10	5.00
SDR1307-390K	39	± 10	28	2.52	9.0	75.0	2.90	4.60
SDR1307-470K	47	± 10	24	2.52	7.5	82.0	2.70	4.20
SDR1307-560K	56	± 10	22	2.52	7.2	95.0	2.50	3.80
SDR1307-680K	68	± 10	24	2.52	7.0	120.0	2.30	3.50
SDR1307-820K	82	± 10	18	2.52	6.0	140.0	2.10	3.20
SDR1307-101K	100	± 10	25	0.796	5.8	180.0	1.90	3.00
SDR1307-121K	120	± 10	20	0.796	5.5	210.0	1.80	2.80
SDR1307-151K	150	± 10	20	0.796	4.5	250.0	1.60	2.60
SDR1307-181K	180	± 10	18	0.796	4.0	280.0	1.50	2.30
SDR1307-221K	220	± 10	15	0.796	3.8	360.0	1.30	2.10
SDR1307-271K	270	± 10	15	0.796	3.5	410.0	1.20	1.80
SDR1307-331K	330	± 10	15	0.796	3.2	520.0	1.10	1.60
SDR1307-391K	390	± 10	12	0.796	2.5	600.0	1.00	1.50
SDR1307-471K	470	± 10	12	0.796	2.2	720.0	0.90	1.40
SDR1307-561K	560	± 10	10	0.796	2.0	880.0	0.85	1.30
SDR1307-681K	680	± 10	10	0.796	1.6	1000.0	0.80	1.20
SDR1307-821K	820	± 10	10	0.796	1.5	1300.0	0.75	1.10
SDR1307-102K	1000	± 10	10	0.252	1.4	1600.0	0.65	1.00

Electrical Schematic



How to Order

Model SDR1307 - 100M

Value/Tolerance: from table

Termination

L = Ag/Ni/Sn
Blank = Ag/Ni/SnPb

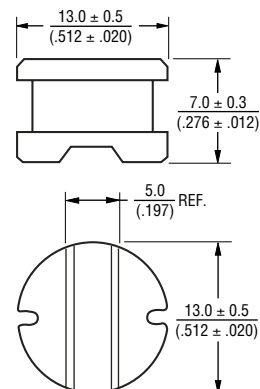
General Specifications

Test Voltage.....0.1 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.

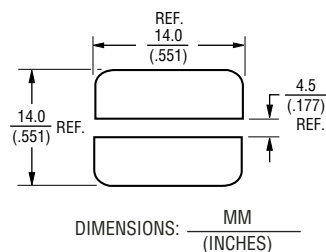
Materials

CoreFerrite DR core
WireEnamelled 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.....400 pcs. per reel

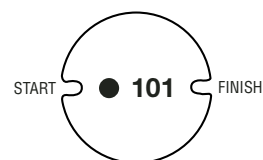
Product Dimensions



Recommended Layout



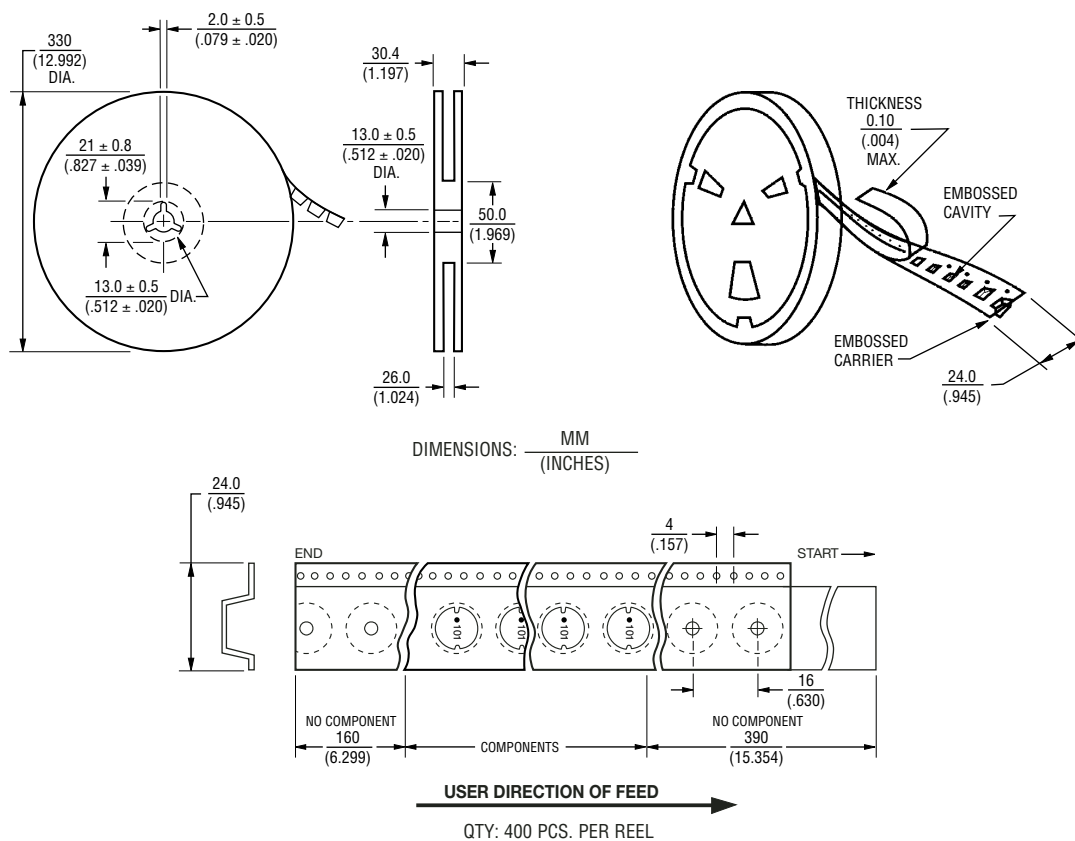
Typical Part Marking



SDR1307 Series - SMD Power Inductors

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Packaging Specifications



REV. 02/05

Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.