



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

Electrical Schematic



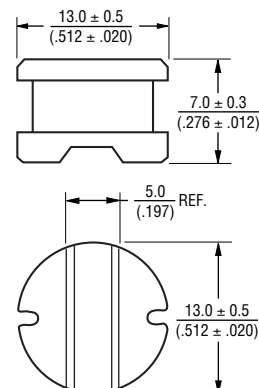
General Specifications

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.

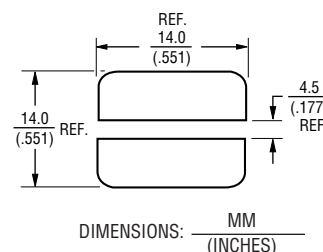
Materials

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

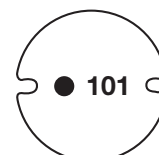
Product Dimensions



Recommended Layout



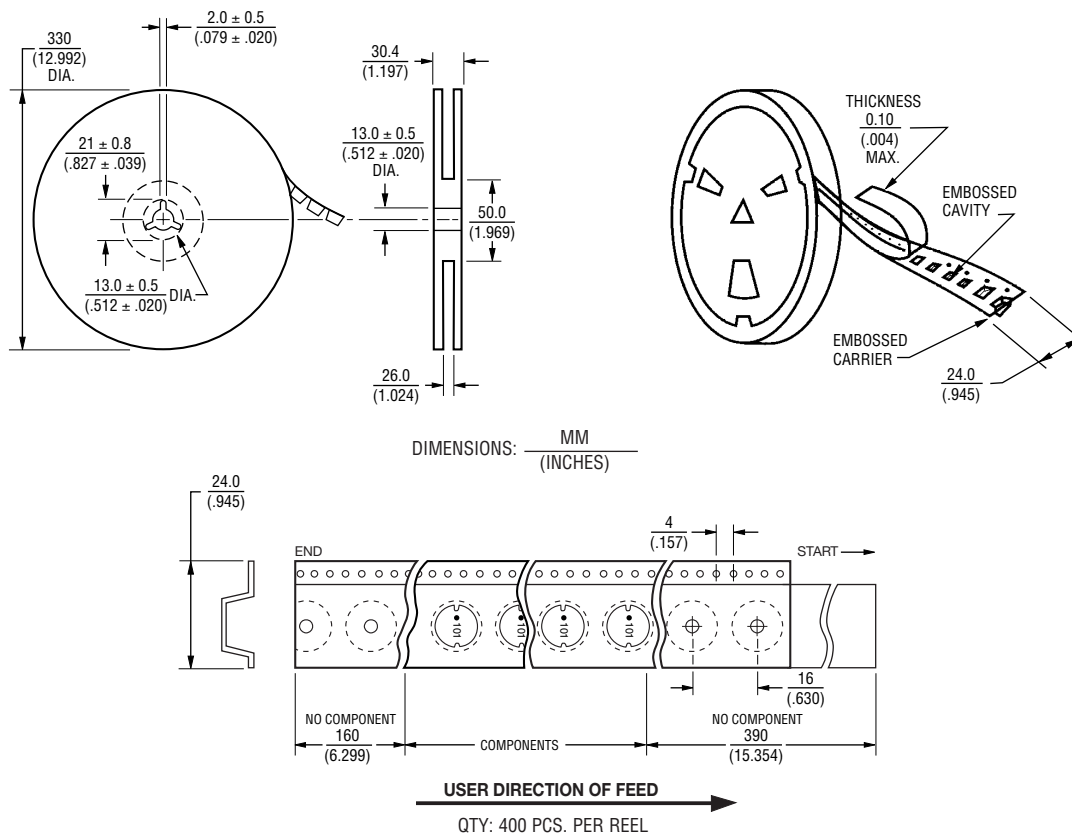
Typical Part Marking



SDR1307 Series - SMD Power Inductors

BOURNS®

Packaging Specifications



REV. 05/12

Specifications are subject to change without notice.

Customers should verify actual device performance in their specific applications.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Bourns:

[SDR1307-161K](#) [SDR1307-270M](#) [SDR1307-680K](#) [SDR1307-100M](#) [SDR1307-150M](#) [SDR1307-681K](#) [SDR1307-102K](#) [SDR1307-470K](#) [SDR1307-120M](#) [SDR1307-2R7M](#) [SDR1307-330K](#) [SDR1307-331K](#) [SDR1307-181K](#) [SDR1307-560K](#) [SDR1307-821K](#) [SDR1307-101K](#) [SDR1307-390K](#) [SDR1307-1R5M](#) [SDR1307-8R2M](#) [SDR1307-180M](#) [SDR1307-221K](#) [SDR1307-3R3M](#) [SDR1307-471K](#) [SDR1307-6R8M](#) [SDR1307-220M](#) [SDR1307-472K](#) [SDR1307-820K](#) [SDR1307-4R7M](#) [SDR1307-271K](#) [SDR1307-151K](#) [SDR1307-2R2M](#) [SDR1307-391K](#) [SDR1307-561K](#) [SDR1307-221M](#) [SDR1307-5R6M](#) [SDR1307-121K](#)