



Features

- Available in E12 series
- Low profile of only 2.5 mm
- Low inductance values
- RoHS compliant*

Applications

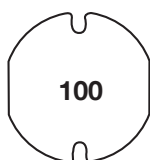
- Input/output of DC/DC converters
- Power supplies for:
 - Portable communication equipment
 - Camcorders
 - LCD TVs
 - Car radios

SDR0302 Series - SMD Power Inductors

Electrical Specifications

Bourns Part No.	Inductance 1kHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC Max. (Ω)	I rms Max. (A)	I sat Typ. (A)
	(μH)	Tol. %						
SDR0302-1R0ML	1.0	± 20	20	7.96	125.0	0.06	2.100	2.700
SDR0302-1R2ML	1.2	± 20	22	7.96	100.0	0.07	2.000	2.500
SDR0302-1R4ML	1.4	± 20	22	7.96	95.0	0.07	1.500	2.300
SDR0302-1R5ML	1.5	± 20	23	7.96	95.0	0.07	1.900	2.300
SDR0302-1R8ML	1.8	± 20	23	7.96	85.0	0.08	1.800	2.000
SDR0302-2R2ML	2.2	± 20	22	7.96	75.0	0.09	1.650	1.850
SDR0302-2R7ML	2.7	± 20	22	7.96	72.0	0.10	1.500	1.700
SDR0302-3R3ML	3.3	± 20	23	7.96	68.0	0.11	1.400	1.600
SDR0302-3R9ML	3.9	± 20	24	7.96	50.0	0.12	1.300	1.500
SDR0302-4R7ML	4.7	± 20	18	7.96	45.0	0.15	1.200	1.350
SDR0302-5R6ML	5.6	± 20	18	7.96	42.0	0.16	1.100	1.300
SDR0302-6R8ML	6.8	± 20	18	7.96	40.0	0.18	1.000	1.200
SDR0302-8R2ML	8.2	± 20	16	7.96	35.0	0.20	0.900	1.050
SDR0302-100ML	10.0	± 20	18	2.52	34.0	0.25	0.800	0.900
SDR0302-120ML	12.0	± 20	15	2.52	33.0	0.28	0.750	0.850
SDR0302-150ML	15.0	± 20	20	2.52	32.0	0.40	0.650	0.800
SDR0302-180ML	18.0	± 20	18	2.52	28.0	0.46	0.580	0.750
SDR0302-220ML	22.0	± 20	23	2.52	22.0	0.66	0.520	0.650
SDR0302-270ML	27.0	± 20	23	2.52	20.0	0.75	0.480	0.550
SDR0302-330KL	33.0	± 10	20	2.52	18.0	0.85	0.420	0.500
SDR0302-390KL	39.0	± 10	24	2.52	18.0	1.12	0.380	0.450
SDR0302-470KL	47.0	± 10	23	2.52	17.0	1.27	0.360	0.400
SDR0302-560KL	56.0	± 10	18	2.52	16.0	1.45	0.340	0.350
SDR0302-680KL	68.0	± 10	24	2.52	14.0	1.85	0.300	0.320
SDR0302-820KL	82.0	± 10	24	2.52	12.0	2.10	0.280	0.300
SDR0302-101KL	100.0	± 10	40	0.796	10.0	2.85	0.260	0.280
SDR0302-121KL	120.0	± 10	40	0.796	10.0	3.20	0.220	0.250
SDR0302-151KL	150.0	± 10	38	0.796	9.0	4.60	0.200	0.230
SDR0302-181KL	180.0	± 10	45	0.796	8.5	5.00	0.185	0.210
SDR0302-221KL	220.0	± 10	40	0.796	8.0	5.70	0.170	0.190
SDR0302-271KL	270.0	± 10	45	0.796	7.0	8.60	0.150	0.170
SDR0302-331KL	330.0	± 10	40	0.796	6.0	10.00	0.130	0.150
SDR0302-391KL	390.0	± 10	40	0.796	5.5	10.80	0.120	0.140
SDR0302-471KL	470.0	± 10	42	0.796	5.0	14.30	0.105	0.130
SDR0302-561KL	560.0	± 10	43	0.796	4.8	16.00	0.095	0.120
SDR0302-681KL	680.0	± 10	43	0.796	4.3	18.00	0.085	0.110
SDR0302-821KL	820.0	± 10	45	0.796	4.0	22.50	0.080	0.100
SDR0302-102KL	1000.0	± 10	40	0.252	3.2	26.00	0.070	0.090
SDR0302-122KL	1200.0	± 10	40	0.252	3.0	30.00	0.060	0.080

Typical Part Marking



Electrical Schematic



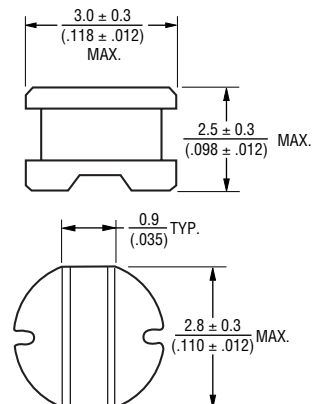
General Specifications

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.

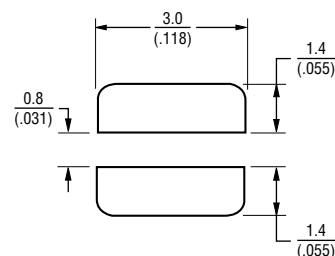
Materials

CoreFerrite DR
 WireEnamelled copper wire 130
 Terminal.....Ag/Ni/Sn
 Rated Current
Ind. drop 10 % typ. at Isat
 Temperature Rise40 °C max.
 at rated Irms
 Packaging2000 pcs. per reel

Product Dimensions



Recommended Layout



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

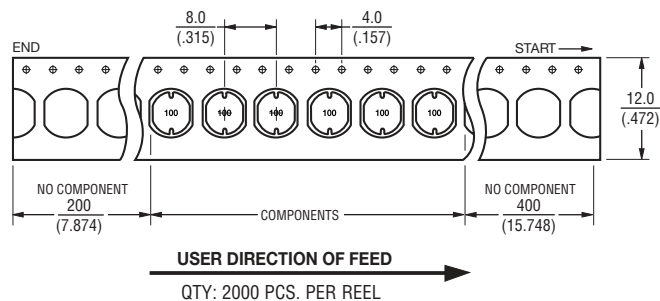
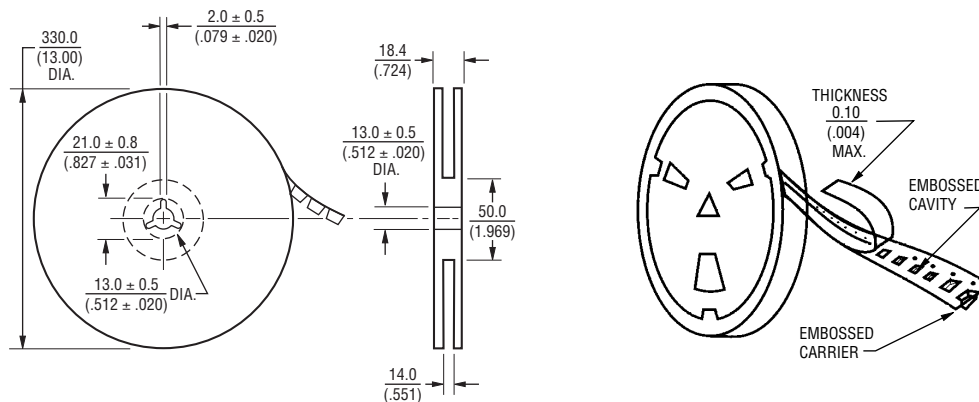
*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
 Specifications are subject to change without notice.

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.

SDR0302 Series - SMD Power Inductors

BOURNS®

Packaging Specifications



DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

REV. 08/14

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.

Mouser Electronics

Authorized Distributor

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Bourns:

<u>SDR0302-1R0M</u>	<u>SDR0302-1R0ML</u>	<u>SDR0302-6R8ML</u>	<u>SDR0302-181KL</u>	<u>SDR0302-1R2ML</u>	<u>SDR0302-5R6ML</u>
<u>SDR0302-560KL</u>	<u>SDR0302-180ML</u>	<u>SDR0302-100ML</u>	<u>SDR0302-2R7ML</u>	<u>SDR0302-680KL</u>	<u>SDR0302-8R2ML</u>
<u>SDR0302-821KL</u>	<u>SDR0302-390KL</u>	<u>SDR0302-1R5ML</u>	<u>SDR0302-391KL</u>	<u>SDR0302-221KL</u>	<u>SDR0302-150ML</u>
<u>SDR0302-820KL</u>	<u>SDR0302-331KL</u>	<u>SDR0302-100MXL</u>	<u>SDR0302-330ML</u>	<u>SDR0302-2R7MXL</u>	<u>SDR0302-330M</u>
<u>SDR0302-102KL</u>	<u>SDR0302-1R8ML</u>	<u>SDR0302-101KL</u>	<u>SDR0302-270ML</u>	<u>SDR0302-3R9ML</u>	<u>SDR0302-122KL</u>
<u>SDR0302-220ML</u>	<u>SDR0302-3R3ML</u>	<u>SDR0302-151KL</u>	<u>SDR0302-471KL</u>	<u>SDR0302-120ML</u>	<u>SDR0302-271KL</u>
<u>SDR0302-121KL</u>	<u>SDR0302-4R7ML</u>	<u>SDR0302-330KL</u>	<u>SDR0302-561KL</u>	<u>SDR0302-470KL</u>	<u>SDR0302-2R2ML</u>
<u>SDR0302-681KL</u>	<u>SDR0302-1R4ML</u>	<u>SDR0302-100KL</u>			