



Features

- Available in E12 series
- Low profile of only 3.2 mm
- Low inductance values
- RoHS compliant*

Applications

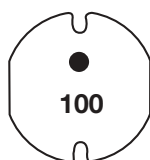
- Input/output of DC/DC converters
- Power supplies for:
 - Portable communications equipment
 - Camcorders
 - LCD TVs

SDR0403 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. %						
SDR0403-1R0ML	1.0	± 20	28	7.96	150	0.033	3.80	5.50
SDR0403-1R4ML	1.4	± 20	28	7.96	110	0.038	3.30	5.10
SDR0403-1R8ML	1.8	± 20	28	7.96	90	0.042	2.91	4.40
SDR0403-2R2ML	2.2	± 20	28	7.96	80	0.047	2.60	3.90
SDR0403-2R7ML	2.7	± 20	28	7.96	75	0.052	2.43	3.50
SDR0403-3R3ML	3.3	± 20	28	7.96	65	0.058	2.15	3.00
SDR0403-3R9ML	3.9	± 20	28	7.96	55	0.076	1.98	2.70
SDR0403-4R7ML	4.7	± 20	28	7.96	50	0.094	1.70	2.60
SDR0403-5R6ML	5.6	± 20	28	7.96	45	0.10	1.60	2.40
SDR0403-6R8ML	6.8	± 20	28	7.96	40	0.12	1.41	2.10
SDR0403-8R2ML	8.2	± 20	28	7.96	36	0.13	1.26	1.90
SDR0403-100ML	10	± 20	28	2.52	33	0.18	1.15	1.70
SDR0403-120ML	12	± 20	28	2.52	30	0.21	1.05	1.60
SDR0403-150ML	15	± 20	28	2.52	28	0.24	0.92	1.40
SDR0403-180ML	18	± 20	25	2.52	23	0.34	0.84	1.30
SDR0403-220ML	22	± 20	25	2.52	20	0.38	0.76	1.20
SDR0403-270KL	27	± 10	23	2.52	17	0.52	0.71	1.00
SDR0403-330KL	33	± 10	23	2.52	15	0.54	0.64	0.99
SDR0403-390KL	39	± 10	20	2.52	14	0.59	0.59	0.92
SDR0403-470KL	47	± 10	20	2.52	13	0.84	0.54	0.78
SDR0403-560KL	56	± 10	20	2.52	12	0.94	0.50	0.74
SDR0403-680KL	68	± 10	20	2.52	11	1.12	0.46	0.68
SDR0403-820KL	82	± 10	25	2.52	10	1.27	0.42	0.58
SDR0403-101KL	100	± 10	35	0.796	9	1.90	0.35	0.51
SDR0403-121KL	120	± 10	50	0.796	8	2.20	0.32	0.44
SDR0403-151KL	150	± 10	50	0.796	8	3.40	0.26	0.40
SDR0403-181KL	180	± 10	50	0.796	5	3.90	0.24	0.39
SDR0403-221KL	220	± 10	50	0.796	4	4.40	0.22	0.33
SDR0403-271KL	270	± 10	45	0.796	3	5.00	0.20	0.30
SDR0403-331KL	330	± 10	40	0.796	4	6.00	0.17	0.25
SDR0403-391KL	390	± 10	40	0.796	3.5	6.40	0.15	0.22
SDR0403-471KL	470	± 10	50	0.796	3	7.00	0.13	0.19
SDR0403-561KL	560	± 10	50	0.796	2.8	7.80	0.12	0.18
SDR0403-681KL	680	± 10	40	0.796	2.8	8.60	0.11	0.16
SDR0403-821KL	820	± 10	38	0.796	2.5	12.00	0.10	0.15
SDR0403-102KL	1000	± 10	38	0.252	2	14.00	0.09	0.13

Typical Part Marking



Electrical Schematic



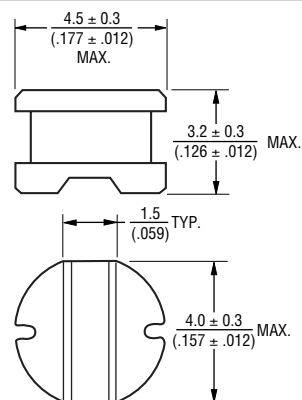
General Specifications

Test Voltage 1 V
 Operating Temperature ... -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature ... -55 °C to +125 °C
 Moisture Sensitivity Level 1
 ESD Classification (HBM) N/A

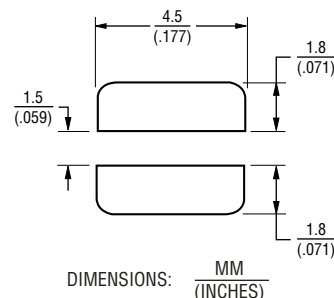
Materials

Core Ferrite DR
 Wire Enameled copper
 Terminal Ag/Ni/Sn
 Rated Current.. Ind. drop 10 % typ. at Isat
 Temp. Rise 40 °C max. at rated Irms
 Packaging 2000 pcs. per reel

Product Dimensions



Recommended Layout



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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BOURNS®

Technical drawing of a 100 Series Embossed Carrier, showing top, side, and end views with dimensions in inches and millimeters.

Top View Dimensions:

- Overall Diameter: 330.0 (12.992) DIA.
- Inner Hole Diameter: 21.0 ± 0.8 (.827 ± .031)
- Inner Hole Diameter: 13.0 ± 0.5 (.512 ± .020) DIA.
- Distance from Center to Edge: 2.0 ± 0.5 (.079 ± .020)

Side View Dimensions:

- Overall Width: 18.4 (.724)
- Distance from Center to Edge: 13.0 ± 0.5 (.512 ± .020) DIA.
- Distance from Center to Edge: 50.0 (1.969)
- Distance from Center to Edge: 14.0 (.551)

End View Dimensions:

- Overall Width: 12 (.472)
- Distance from Center to Edge: 3.4 (.134)

Carrier Details:

- THICKNESS: 0.10 (.004) MAX.
- EMBOSSED CAVITY
- EMBOSSED CARRIER

End View Dimensions (Left to Right):

- END
- NO COMPONENT 200 (7.874)
- COMPONENTS 3200 (125.984)
- NO COMPONENT 400 (15.748)
- START

Dimensions:

- 1.5 (.059) DIA.
- 8.0 (.315)

USER DIRECTION OF FEED

QTY: 2000 PCS. PER REEL

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

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