



Features

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

Applications

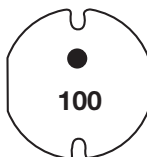
- Input/output of DC/DC converters
- Power supplies for:
 - Portable communication equipment
 - Camcorders
 - LCD TVs
 - Car radios

SDR0403 Series - SMD Power Inductors

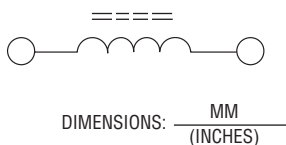
Electrical Specifications

Bourns Part No.	Inductance 1kHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC Max. (Ω)	I rms Max. (A)	I sat Typ. (A)
	(μ H)	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



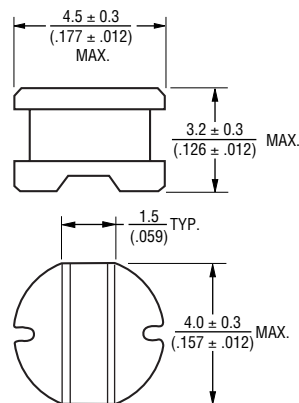
General Specifications

Test Voltage.....1 V
 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.

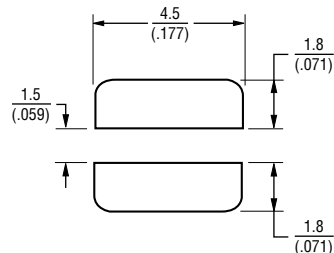
Materials

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

Product Dimensions



Recommended Layout



BOURNS®

330.0
(12.992)
DIA.

2.0 ± 0.5
(.079 ± .020)

21.0 ± 0.8
(.827 ± .031)

13.0 ± 0.5
(.512 ± .020)
DIA.

18.4
(.724)

13.0 ± 0.5
(.512 ± .020)
DIA.

50.0
(1.969)

14.0
(.551)

THICKNESS
0.10
(.004)
MAX.

EMBOSSED
CAVITY

EMBOSSED
CARRIER

12
(.472)

3.4
(.134)

END

START

1.5
(.059)
DIA.

8.0
(.315)

NO COMPONENT
160
(6.299)

COMPONENTS
3200
(125.984)

NO COMPONENT
400
(15.748)

USER DIRECTION OF FEED

QTY: 2000 PCS. PER REEL

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

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

Mouser Electronics

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Bourns:

[SDR0403-1R0M](#) [SDR0403-390K](#) [SDR0403-330K](#) [SDR0403-820K](#) [SDR0403-151K](#) [SDR0403-150M](#) [SDR0403-270K](#) [SDR0403-6R8M](#) [SDR0403-181K](#) [SDR0403-180M](#) [SDR0403-271K](#) [SDR0403-121K](#) [SDR0403-1R8M](#) [SDR0403-4R7M](#) [SDR0403-120M](#) [SDR0403-680K](#) [SDR0403-1R4M](#) [SDR0403-221K](#) [SDR0403-5R6M](#) [SDR0403-220M](#) [SDR0403-470K](#) [SDR0403-560K](#) [SDR0403-101K](#) [SDR0403-3R3M](#) [SDR0403-100M](#) [SDR0403-2R7M](#) [SDR0403-8R2M](#) [SDR0403-2R2M](#)