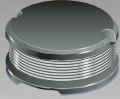


\*RoHS COMPLIANT



**BOURNS®**

## Features

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

## Applications

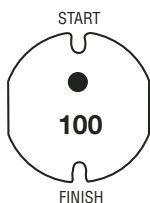
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs
  - Car radios

# SDR0403 Series - SMD Power Inductors

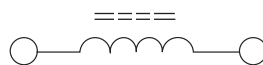
### Electrical Specifications

Bourns Part No.	Inductance 1kHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC (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



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

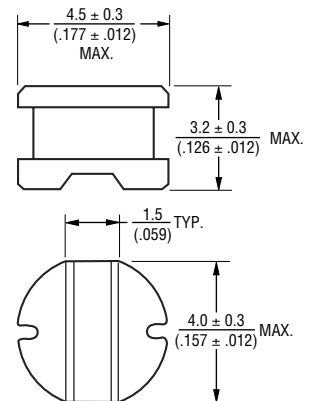
### General Specifications

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.

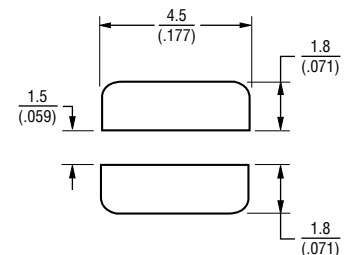
### Materials

Core .....Ferrite DR  
 Wire .....Enameled copper wire 130  
 Terminal.....Ag/Ni/Sn  
 Rated Current  
 .....Ind. drop 10 % typ. at Isat  
 Temperature Rise .....40 °C max.  
 at rated I rms  
 Packaging .....2000 pcs. per reel

### Product Dimensions



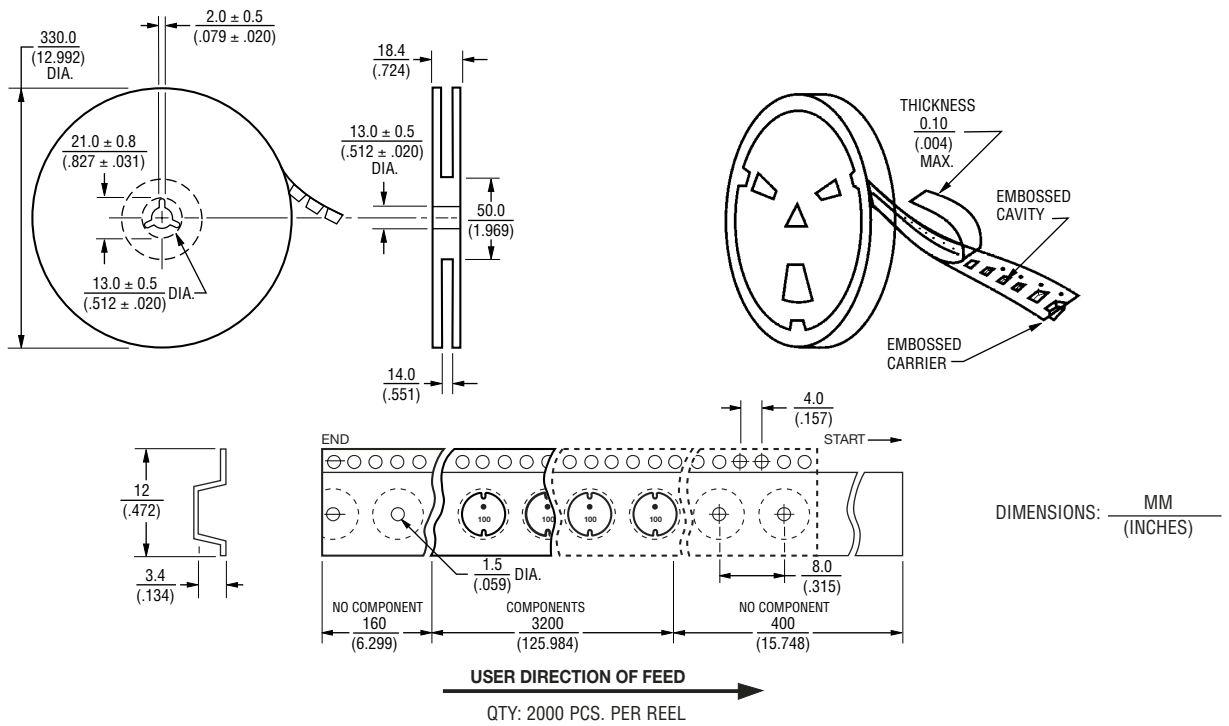
### Recommended Layout



\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

# SDR0403 Series - SMD Power Inductors

## Packaging Specifications



REV. 09/08

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