



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

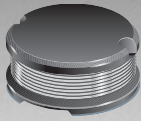
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



*RoHS COMPLIANT



BOURNS®

Features

- Available in E12 series
- Low profile of only 3.3 mm
- High inductance of 15 mH
- RoHS compliant*

Applications

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

SDR0503 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. %						
SDR0503-100ML	10	± 20	10	2.52	30.0	0.13	1.300	1.600
SDR0503-120ML	12	± 20	20	2.52	29.0	0.16	1.200	1.450
SDR0503-150ML	15	± 20	20	2.52	27.0	0.19	1.050	1.260
SDR0503-180ML	18	± 20	20	2.52	24.0	0.21	0.950	1.300
SDR0503-220ML	22	± 20	20	2.52	22.0	0.28	0.900	1.060
SDR0503-270ML	27	± 20	20	2.52	20.0	0.32	0.800	1.000
SDR0503-330KL	33	± 10	15	2.52	18.0	0.38	0.700	0.850
SDR0503-390KL	39	± 10	15	2.52	17.0	0.42	0.650	0.800
SDR0503-470KL	47	± 10	20	2.52	14.0	0.60	0.600	0.750
SDR0503-560KL	56	± 10	20	2.52	13.0	0.71	0.500	0.700
SDR0503-680KL	68	± 10	20	2.52	12.0	0.76	0.450	0.600
SDR0503-820KL	82	± 10	15	2.52	10.0	0.88	0.420	0.520
SDR0503-101KL	100	± 10	40	0.796	9.0	1.60	0.400	0.480
SDR0503-121KL	120	± 10	40	0.796	8.0	1.70	0.370	0.450
SDR0503-151KL	150	± 10	40	0.796	7.0	2.00	0.330	0.400
SDR0503-181KL	180	± 10	40	0.796	7.0	2.30	0.300	0.350
SDR0503-221KL	220	± 10	35	0.796	6.0	2.50	0.250	0.340
SDR0503-271KL	270	± 10	35	0.796	6.0	2.90	0.230	0.280
SDR0503-331KL	330	± 10	30	0.796	5.0	3.30	0.210	0.280
SDR0503-391KL	390	± 10	30	0.796	5.0	3.70	0.190	0.240
SDR0503-471KL	470	± 10	30	0.796	5.0	4.90	0.180	0.220
SDR0503-561KL	560	± 10	30	0.796	4.0	5.70	0.160	0.190
SDR0503-681KL	680	± 10	30	0.796	4.0	7.50	0.140	0.160
SDR0503-821KL	820	± 10	40	0.796	3.0	10.00	0.120	0.155
SDR0503-102KL	1000	± 10	40	0.252	3.0	11.50	0.110	0.135
SDR0503-122JL	1200	± 5	40	0.252	3.0	12.00	0.063	0.090
SDR0503-152JL	1500	± 5	40	0.252	2.0	13.00	0.059	0.072
SDR0503-182JL	1800	± 5	40	0.252	2.0	15.00	0.055	0.070
SDR0503-222JL	2200	± 5	40	0.252	2.0	22.00	0.053	0.070
SDR0503-272JL	2700	± 5	40	0.252	2.0	26.00	0.050	0.070
SDR0503-332JL	3300	± 5	40	0.252	2.0	38.00	0.045	0.062
SDR0503-392JL	3900	± 5	40	0.252	2.0	40.00	0.042	0.060
SDR0503-472JL	4700	± 5	40	0.252	1.0	48.00	0.040	0.050
SDR0503-502JL	5000	± 5	40	0.252	1.0	60.00	0.039	0.050
SDR0503-562JL	5600	± 5	40	0.252	1.0	72.00	0.038	0.050
SDR0503-682JL	6800	± 5	40	0.252	1.0	80.00	0.034	0.045
SDR0503-822JL	8200	± 5	40	0.252	1.0	92.00	0.030	0.045
SDR0503-103JL	10000	± 5	30	0.0796	1.0	110.00	0.027	0.040
SDR0503-123JL	12000	± 5	30	0.0796	1.0	148.00	0.025	0.038
SDR0503-153JL	15000	± 5	30	0.0796	1.0	168.00	0.020	0.032

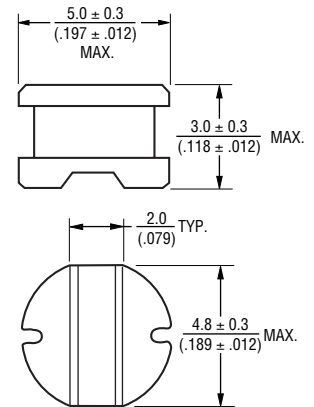
General Specifications

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.

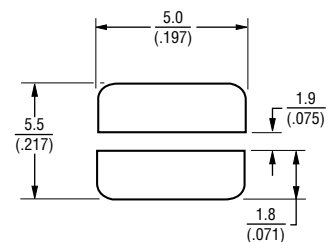
Materials

CoreFerrite DR
 WireEnameled copper
 Terminal.....Ag/Ni/Sn
 Rated Current..Ind. drop 10 % typ. at Isat
 Temperature Rise40 °C max.
 at rated Irms
 Packaging500 pcs. per reel

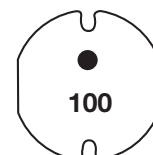
Product Dimensions



Recommended Layout



Typical Part Marking



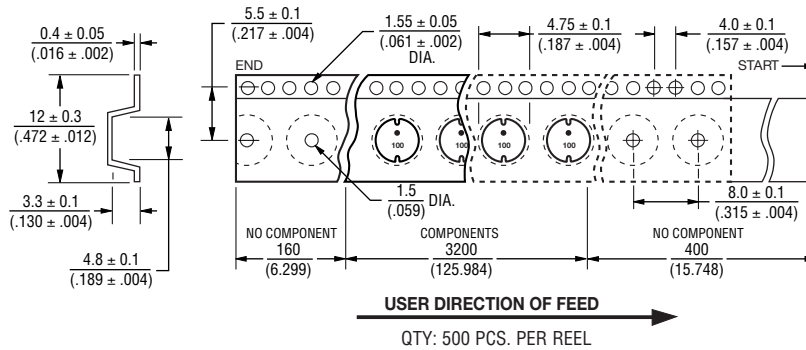
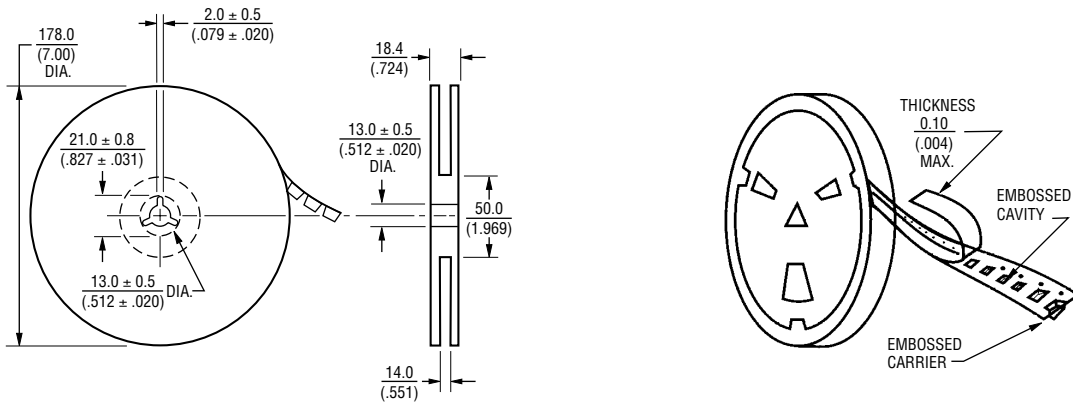
*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
 Specifications are subject to change without notice.
 Customers should verify actual device performance in their specific applications.

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

SDR0503 Series - SMD Power Inductors

BOURNS®

Packaging Specifications



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