THE DATASHEET OF

SDR0503-471KL

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 communications equipment
  - Camcorders
  - LCD TVs

BOURNS®

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

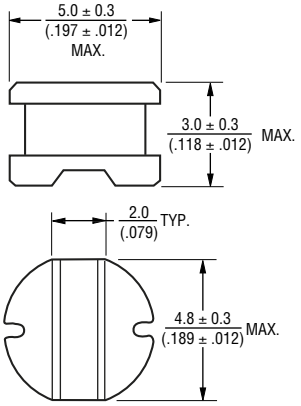
General Specifications

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.
Moisture Sensitivity Level 1
ESD Classification (HBM)..... N/A

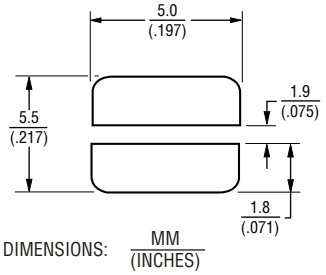
Materials

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.....500 pcs. per reel

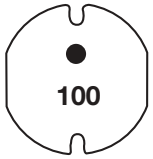
Product Dimensions



Recommended Layout



Typical Part Marking



Electrical Schematic

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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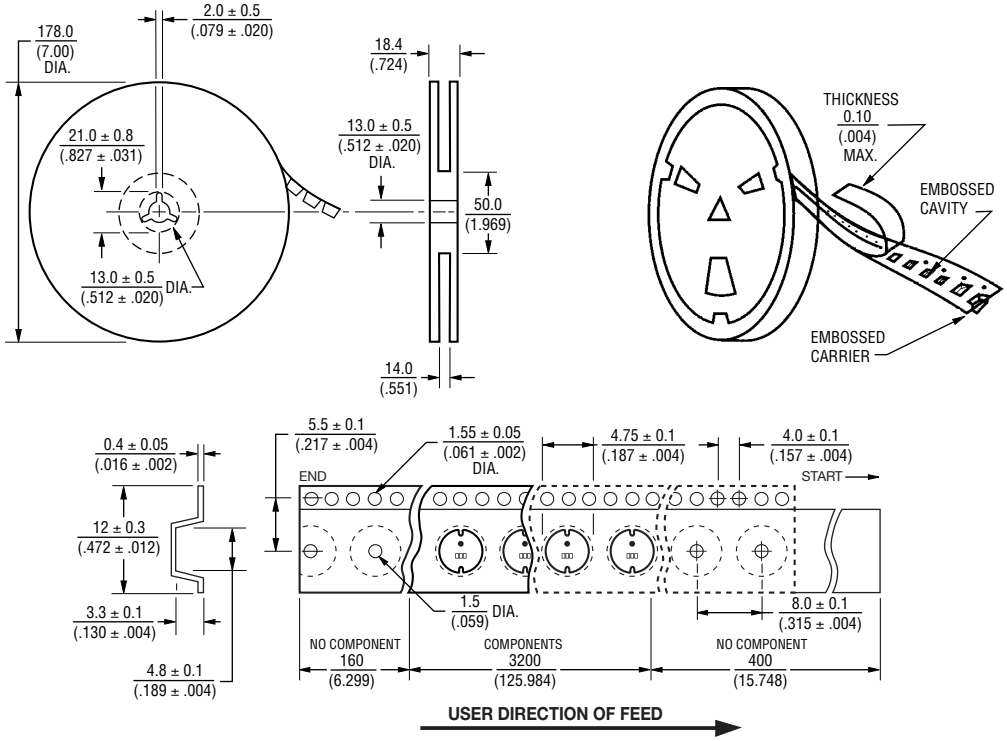
Packaging Specifications



QTY: 500 PCS. PER REEL

DIMENSIONS: MM / (INCHES)

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REV. 02/18

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- Shortage Management
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