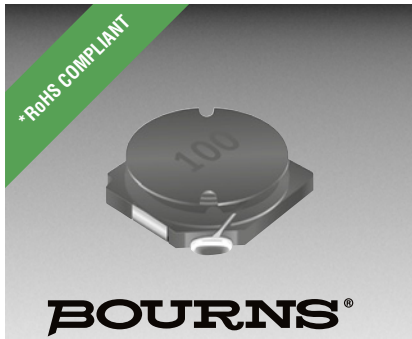




**THE DATASHEET OF
SDR1305-681K**





Features

- Available in E6 values
- Current rating to 7.2 amps
- RoHS compliant*

Applications

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

SDR1305 Series - SMD Power Inductors

Electrical Specifications

Bourns Part Number	Inductance 100 kHz		Q Typ.	Test Frequency (MHz)	SRF Min. (MHz)	RDC Max. (Ω)	I rms Max. (A)	I sat Typ. (A)
	(μH)	Tol. %						
SDR1305-2R5Y	2.5	± 25	19	7.96	61	0.0098	7.20	8.00
SDR1305-3R5Y	3.5	± 25	20	7.96	43	0.0105	6.00	7.00
SDR1305-4R6Y	4.6	± 25	18	7.96	35	0.0165	5.20	6.00
SDR1305-6R8Y	6.8	± 25	17	7.96	32	0.0240	4.30	5.20
SDR1305-100M	10.0	± 20	35	2.52	27	0.0370	3.60	4.40
SDR1305-150M	15.0	± 20	28	2.52	24	0.0460	3.30	3.70
SDR1305-220M	22.0	± 20	27	2.52	20	0.0620	2.90	3.00
SDR1305-330M	33.0	± 20	23	2.52	16	0.0850	2.50	2.60
SDR1305-470M	47.0	± 20	24	2.52	13	0.1300	1.90	2.00
SDR1305-680M	68.0	± 20	22	2.52	11	0.1650	1.65	1.80
SDR1305-101K	100.0	± 10	20	0.796	11	0.2550	1.40	1.40
SDR1305-151K	150.0	± 10	17	0.796	8	0.3800	1.20	1.15
SDR1305-221K	220.0	± 10	16	0.796	7	0.5000	1.00	0.95
SDR1305-331K	330.0	± 10	11	0.796	6	0.7000	0.85	0.80
SDR1305-471K	470.0	± 10	14	0.796	4	1.1500	0.67	0.70
SDR1305-681K	680.0	± 10	12	0.796	3.5	1.4000	0.60	0.58
SDR1305-102K	1000.0	± 10	41	0.252	2.7	2.3500	0.46	0.47
SDR1045-102K	1000.0	± 10	25	0.252	2.9	4.700	0.38	0.40

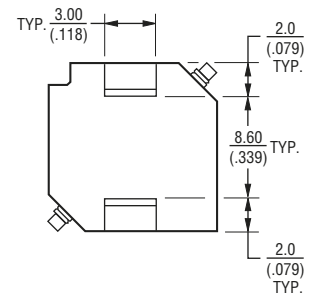
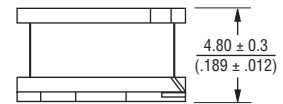
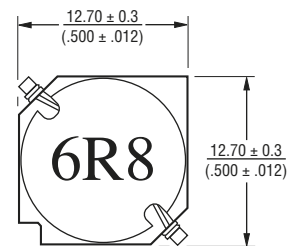
General Specifications

Test Voltage 10 mV
 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 10 sec.
 Moisture Sensitivity Level..... 1
 ESD Classification (HBM).....N/A

Materials

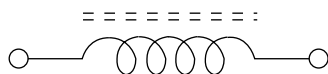
Core Ferrite DR
 Wire Enamelled copper wire 130
 Terminal..... Cu/Sn
 Rated Current
 Ind. drop 25 % typ. at Isat
 Temperature Rise
 40 °C max. at rated I rms
 Packaging..... 600 pcs. per reel

Product Dimensions

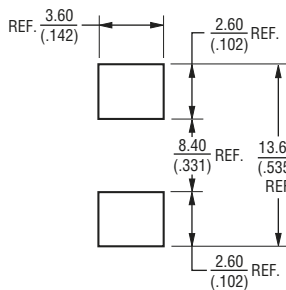


DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

Electrical Schematic



Recommended Layout



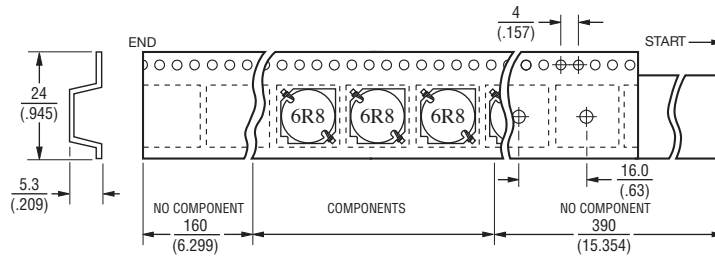
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
 Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf

SDR1305 Series - SMD Power Inductors

BOURNS®

Packaging Specifications



USER DIRECTION OF FEED →

QTY: 600 PCS. PER REEL

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

BOURNS®

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EMEA: Tel: +36 88 520 390 • Email: eurocus@bourns.com

The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

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