



Features

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

Applications

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

SDR1305 Series - SMD Power Inductors

Electrical Specifications

Bourns Part No.	Inductance 100 kHz		Q Typ.	Test Frequency (MHz)	SRF Min. (MHz)	RDC Max. (Ω)	I rms Max. (A)	I sat Typ. (A)
	(μ H)	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

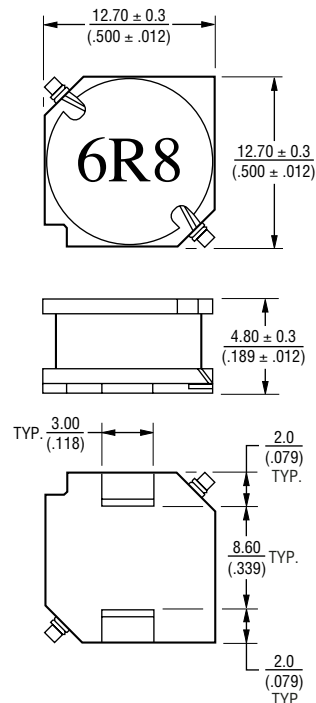
General Specifications

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.

Materials

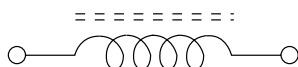
Core Ferrite DR
 Wire Enamelled copper wire 130
 Terminal Cu/Sn
 Rated Current
 Ind. drop 25 % typ. at Isat
 Temperature Rise 40 °C max.
 at rated I rms
 Packaging 600 pcs. per reel

Product Dimensions

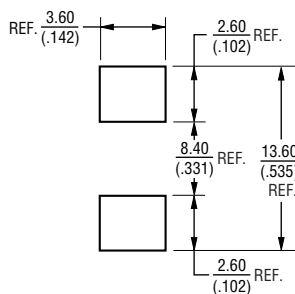


DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

Electrical Schematic



Recommended Layout



*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.

BOURNS®

Technical drawing of a 100 Euro coin. The drawing includes a top view, a side view, and a cross-section view. Dimensions are given in millimeters (mm) and inches (in).

Top View Dimensions:

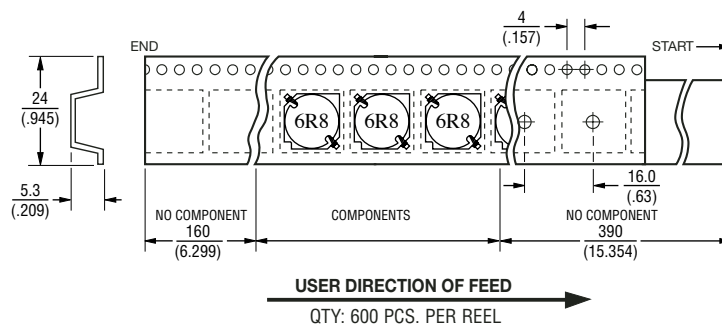
- Outer diameter: 330 ± 0.5 DIA. (12.99 in)
- Inner diameter (hole): 21.0 ± 0.8 DIA. (0.827 ± 0.031 in)
- Inner diameter (hole): 13.0 ± 0.5 DIA. (0.512 ± 0.020 in)

Side View Dimensions:

- Thickness: 2.0 ± 0.5 mm (0.079 ± 0.020 in)
- Width of the rim: 30.4 mm (1.20 in)
- Width of the central hole: 13.0 ± 0.5 DIA. (0.512 ± 0.020 in)
- Distance from the center to the edge of the rim: 50.0 mm (1.969 in)
- Distance from the center to the edge of the central hole: 26 mm (1.02 in)

Cross-section View:

- THICKNESS: 0.10 mm (0.004 in) MAX.
- EMBOSSED CAVITY
- EMBOSSED CARRIER



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

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