



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
 - 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)
	(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

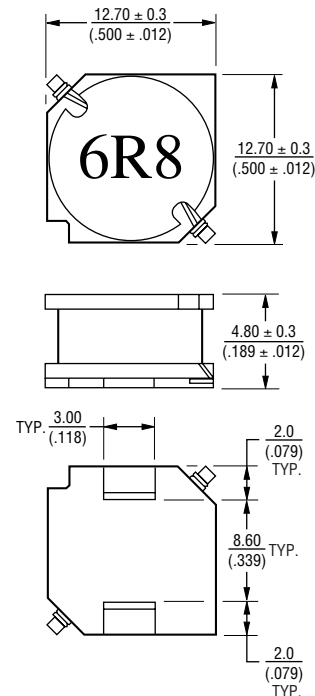
General Specifications

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

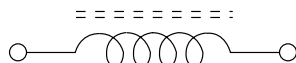
CoreFerrite DR
 WireEnamelled copper wire 130
 TerminalCu/Sn
 Rated Current
Ind. drop 25 % typ. at Isat
 Temperature Rise40 °C max.
 at rated Irms
 Packaging600 pcs. per reel

Product Dimensions

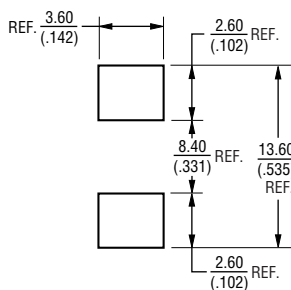


DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

Electrical Schematic



Recommended Layout



BOURNS®

Technical drawing of a 6R8 component, showing three views: Top View, Side View, and End View.

Top View Dimensions:

- Overall Diameter: 330 (12.99) DIA.
- Inner Hole Diameter: 2.0 ± 0.5 (.079 $\pm$.020)
- Inner Hole Diameter: 21.0 ± 0.8 (.827 $\pm$.031)
- Inner Hole Diameter: 13.0 ± 0.5 (.512 $\pm$.020) DIA.

Side View Dimensions:

- Overall Width: 30.4 (1.20)
- Inner Hole Diameter: 13.0 ± 0.5 (.512 $\pm$.020) DIA.
- Inner Hole Diameter: 50.0 (1.969)
- Inner Hole Diameter: 26 (1.02)

End View Dimensions:

- THICKNESS: 0.10 (.004) MAX.
- EMBOSSED CAVITY
- EMBOSSED CARRIER

End View Details:

- END
- START
- 4 (.157)
- 24 (.945)
- 5.3 (.209)
- NO COMPONENT 160 (6.299)
- COMPONENTS
- NO COMPONENT 390 (15.354)
- 16.0 (.63)
- 6R8

USER DIRECTION OF FEED

QTY: 600 PCS. PER REEL

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Bourns:

[SDR1305-4R6YL](#) [SDR1305-331KL](#) [SDR1305-100ML](#) [SDR1305-470ML](#) [SDR1305-471KL](#) [SDR1305-2R5YL](#)
[SDR1305-150ML](#) [SDR1305-680ML](#) [SDR1305-330ML](#) [SDR1305-101KL](#) [SDR1305-102KL](#) [SDR1305-6R8YL](#)
[SDR1305-221KL](#) [SDR1305-220ML](#) [SDR1305-3R5YL](#) [SDR1305-151KL](#) [SDR1305-681KL](#)