



RL-8300

SMD POWER INDUCTORS

DESCRIPTION

- SMD Power Inductor

ENVIRONMENTAL DATA

- Storage temperature range: -55°C to +130°C
- Operating temperature range: -40°C to +130°C

PACKAGING INFORMATION

- Packaging information: pg. 491

FEATURES & APPLICATIONS

- Perfect for small applications
- Standing at only 1 millimeter tall, this power inductor is available in 16 values with inductance ratings from 1.2 μ H to 330 μ H and currents up to 1.7 A

Verify operation with sample in actual circuit. Order samples at www.rencousa.com.

MECHANICAL DIMENSIONS

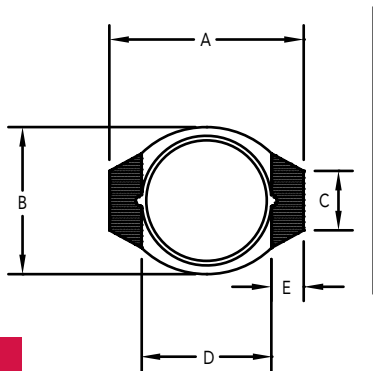
U.S. Standard (mm)

PART NUMBER	A (MAX.)	B (MAX.)	C ± 0.008 (0.2)	D ± 0.012 (0.3)	E	F (MAX.)
RL-8300	0.260 (6.60)	0.217 (5.50)	0.100 (2.50)	0.190 (4.90)	0.040 (1.00)	0.030 (0.76)

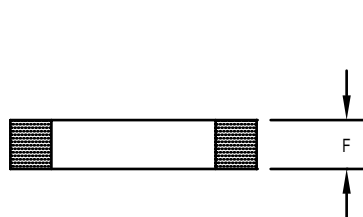
PART NUMBER	PART WEIGHT
RL-8300	0.3g (0.01oz)

G (REF.)	H (REF.)	I (REF.)	J (REF.)
0.043 (1.10)	0.150 (3.80)	0.185 (4.70)	0.100 (2.50)

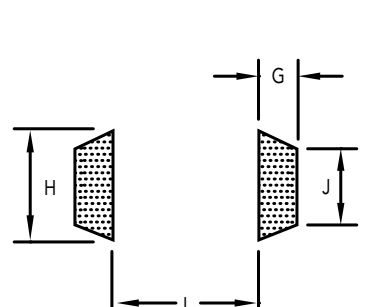
TOP VIEW



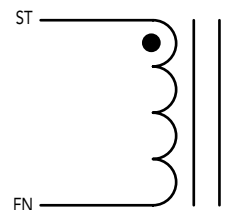
SIDE VIEW



RECOMMENDED LAND PATTERN



SCHEMATIC



RL-8300

Renco Part No. RL-8300	Inductance (μ H) $\pm 20\%$	DCR Max. (Ohms)	Isat (A)	Irms (A)	SRF (MHz) TYP.
RL-8300-1R2M	1.2	0.08	2.10	1.70	190.0
RL-8300-1R5M	1.5	0.10	1.90	1.50	140.0
RL-8300-2R2M	2.2	0.12	1.60	1.40	115.0
RL-8300-3R3M	3.3	0.16	1.30	1.20	90.0
RL-8300-4R7M	4.7	0.20	1.10	1.10	88.0
RL-8300-6R8M	6.8	0.32	0.90	0.85	66.0
RL-8300-100M	10.0	0.41	0.80	0.75	55.0
RL-8300-150M	15.0	0.55	0.65	0.60	42.0
RL-8300-220M	22.0	0.85	0.50	0.52	38.0
RL-8300-330M	33.0	1.30	0.40	0.42	29.0
RL-8300-470M	47.0	1.80	0.35	0.36	22.0
RL-8300-680M	68.0	2.50	0.30	0.30	18.0
RL-8300-101M	100.0	3.50	0.25	0.26	14.0
RL-8300-151M	150.0	5.00	0.18	0.21	12.0
RL-8300-221M	220.0	7.00	0.16	0.18	10.0
RL-8300-331M	330.0	15.00	0.13	0.13	8.0

NOTES:

1. INDUCTANCE $\pm 20\%$ TESTED AT 100 kHz, 0.1 Vrms
2. Isat - DC CURRENT THAT WILL CAUSE INDUCTANCE TO DROP BY 10%
3. Irms - CURRENT THAT CAUSES THE TEMPERATURE TO RISE
APPROX. 40°C ABOVE AMBIENT OF 25°C
4. ELECTRICAL SPECIFICATIONS MEASURED AT 25°C
5. RESISTANCE TO SOLDER HEAT: 260°C 10 SECONDS



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