

RL-1500

SURFACE MOUNT INDUCTORS

DESCRIPTION

- Compact Surface Mount Inductors

ENVIRONMENTAL DATA

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

PACKAGING INFORMATION

- Packaging information: pg. 489, 493

FEATURES & APPLICATIONS

- Over 45 standard inductive values covering a range of 1.0 μ H to 6.8 mH with rated currents of up to 1.8 A
- Uses a nonconductive, high-volume resistivity, low-loss ferrite material
- Square-shaped encapsulation cover and flat top make this component highly suitable for automated pick and place assembly

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

MECHANICAL DIMENSIONS

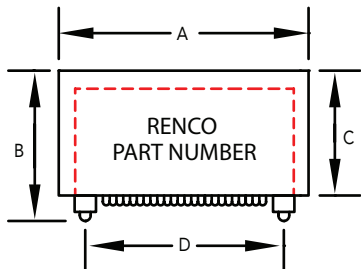
U.S. Standard (mm)

PART NUMBER	A	B (MAX.)	C	D	E	F
RL-1500	0.440 (11.18)	0.350 (8.89)	0.210 (5.33)	0.319 (8.10)	0.300 (7.62)	0.020 (0.51)

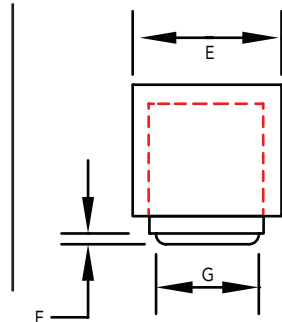
PART NUMBER	PART WEIGHT
RL-1500	1.8g (0.063oz)

G	H (REF.)	I (REF.)	J (REF.)
0.210 (5.33)	0.050 (1.27)	0.225 (5.72)	0.269 (6.83)

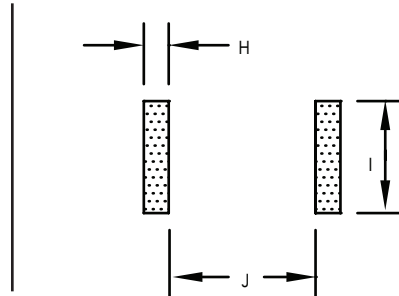
FRONT VIEW



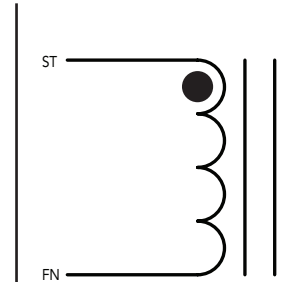
SIDE VIEW



RECOMMENDED LAND PATTERN



SCHEMATIC



RL-1500

Renco Part No. RL-1500	Inductance (μ H)	DCR Max. (Ohms)	I _{rms} (A)	I _{sat} 5% (A)	I _{sat} 10% (A)
RL-1500-1.0	1.0	0.012	1.80	16.20	18.20
RL-1500-1.2	1.2	0.013	1.80	15.30	17.10
RL-1500-1.5	1.5	0.014	1.80	14.40	16.20
RL-1500-1.8	1.8	0.015	1.80	9.00	13.50
RL-1500-2.2	2.2	0.022	1.40	8.60	10.80
RL-1500-2.7	2.7	0.032	1.20	8.10	9.90
RL-1500-3.3	3.3	0.034	1.20	7.70	8.10
RL-1500-3.9	3.9	0.065	0.70	6.50	7.20
RL-1500-4.7	4.7	0.068	0.70	5.50	6.50
RL-1500-5.6	5.6	0.073	0.70	5.20	6.20
RL-1500-6.8	6.8	0.077	0.70	5.00	6.00
RL-1500-8.2	8.2	0.081	0.70	4.80	5.90
RL-1500-10	10.0	0.103	0.70	4.70	5.40
RL-1500-12	12.0	0.107	0.70	4.40	4.80
RL-1500-15	15.0	0.112	0.70	4.10	4.50
RL-1500-18	18.0	0.125	0.70	3.80	4.30
RL-1500-22	22.0	0.167	0.60	3.00	3.20
RL-1500-27	27.0	0.218	0.50	2.60	2.90
RL-1500-33	33.0	0.308	0.30	2.40	2.70
RL-1500-39	39.0	0.340	0.30	2.30	2.50
RL-1500-47	47.0	0.370	0.30	2.10	2.30
RL-1500-56	56.0	0.409	0.30	1.90	2.20
RL-1500-68	68.0	0.449	0.30	1.80	2.00
RL-1500-82	82.0	0.488	0.30	1.70	1.90
RL-1500-100	100.0	0.961	0.20	1.60	1.80
RL-1500-120	120.0	1.030	0.20	1.40	1.70
RL-1500-150	150.0	1.080	0.20	1.40	1.60
RL-1500-180	180.0	1.190	0.20	1.30	1.40
RL-1500-220	220.0	1.250	0.20	1.20	1.40
RL-1500-270	270.0	1.560	0.15	1.10	1.30
RL-1500-330	330.0	1.800	0.15	1.00	1.20
RL-1500-390	390.0	2.620	0.12	0.90	1.10
RL-1500-470	470.0	2.880	0.12	0.81	0.90
RL-1500-560	560.0	3.830	0.10	0.72	0.81
RL-1500-680	680.0	4.200	0.10	0.58	0.70

RL-1500 TABLE CONTINUES ON FOLLOWING PAGE

NOTES:

1. INDUCTANCE \pm 10% TESTED AT 10 kHz, 0.1 V_{rms}
2. TOLERANCE FOR VALUES FROM 1 μ H TO 10 μ H ARE \pm 20%
3. ELECTRICAL SPECIFICATIONS MEASURED AT 25°C
4. I_{sat} - DC CURRENT THAT WILL CAUSE INDUCTANCE TO DROP BY PERCENTAGE SHOWN ABOVE
5. I_{rms} - CURRENT THAT CAUSES THE TEMPERATURE TO RISE APPROX. 40°C ABOVE AMBIENT OF 25°C



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RL-1500

Renco Part No. RL-1500	Inductance (μ H)	DCR Max. (Ohms)	I _{rms} (A)	I _{sat} 5% (A)	I _{sat} 10% (A)
RL-1500-820	820.0	4.53	0.100	0.54	0.63
RL-1500-1000	1000.0	4.79	0.100	0.52	0.61
RL-1500-1200	1200.0	6.34	0.075	0.49	0.56
RL-1500-1500	1500.0	7.30	0.075	0.46	0.49
RL-1500-1800	1800.0	11.22	0.060	0.43	0.47
RL-1500-2200	2200.0	12.41	0.060	0.38	0.43
RL-1500-2700	2700.0	16.10	0.060	0.28	0.31
RL-1500-3300	3300.0	18.35	0.060	0.26	0.29
RL-1500-3900	3900.0	24.82	0.060	0.25	0.28
RL-1500-4700	4700.0	25.48	0.030	0.23	0.26
RL-1500-5600	5600.0	31.83	0.030	0.21	0.23
RL-1500-6800	6800.0	36.90	0.030	0.19	0.21

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4. I_{sat} - DC CURRENT THAT WILL CAUSE INDUCTANCE TO DROP BY PERCENTAGE SHOWN ABOVE
5. I_{rms} - CURRENT THAT CAUSES THE TEMPERATURE TO RISE APPROX. 40°C ABOVE AMBIENT OF 25°C

