



RL-8500

SMD HIGH CURRENT TOROID INDUCTORS

DESCRIPTION

- SMD Toroid Inductors

ENVIRONMENTAL DATA

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

PACKAGING INFORMATION

- Packaging information: pg. 495

FEATURES & APPLICATIONS

- Low cost
- Low EMI
- Low core loss
- High current capacity
- DC-DC converters
- Power factor correction inductor
- Differential mode chokes
- EMI/RFI filter applications

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

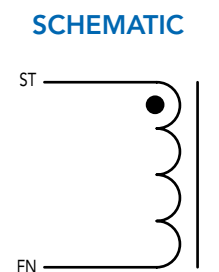
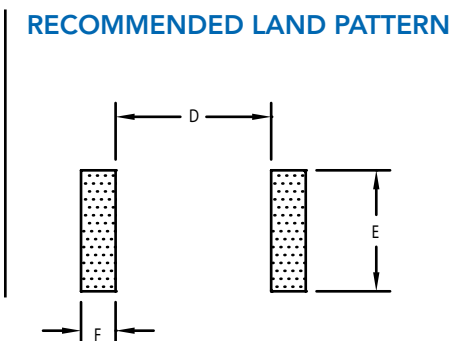
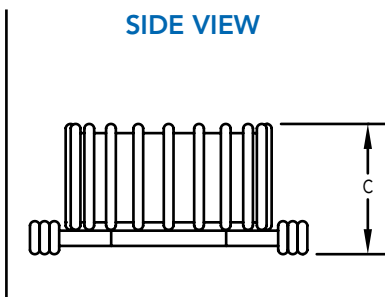
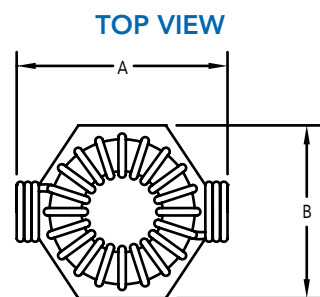
MECHANICAL DIMENSIONS

U.S. Standard (mm)

PART NUMBER	A (MAX.)	B (MAX.)	C (MAX.)	D (REF.)	E (REF.)	F (REF.)
RL-8500-1	1.22 (30.99)	1.00 (25.40)	See Table	0.90 (22.86)	0.70 (17.78)	0.20 (5.08)
RL-8500-2	1.22 (30.99)	1.00 (25.40)	See Table	0.90 (22.86)	0.70 (17.78)	0.20 (5.08)

PART NUMBER PART WEIGHT

RL-8500-1	16.0g (0.56oz)
RL-8500-2	29.0g (1.02oz)



RL-8500-1

Renco Part No. RL-8500-1	Inductance (μ H)	Irms (A)	L (μ H) @ Rated Irms	DCR Max. (Ohms)	DIM. C Max.
RL-8500-1-1.0	1.0 $\pm$ 20%	22.7	0.68	0.0030	0.57
RL-8500-1-1.2	1.2 $\pm$ 20%	20.3	0.85	0.0030	0.57
RL-8500-1-1.5	1.5 $\pm$ 20%	20.3	1.02	0.0040	0.57
RL-8500-1-1.8	1.8 $\pm$ 20%	18.5	1.20	0.0035	0.57
RL-8500-1-2.2	2.2 $\pm$ 20%	17.2	1.45	0.0035	0.57
RL-8500-1-2.7	2.7 $\pm$ 20%	16.0	1.70	0.0040	0.57
RL-8500-1-3.3	3.3 $\pm$ 20%	16.0	2.13	0.0047	0.57
RL-8500-1-3.9	3.9 $\pm$ 20%	15.1	2.38	0.0050	0.57
RL-8500-1-4.7	4.7 $\pm$ 20%	14.4	2.90	0.0050	0.57
RL-8500-1-5.6	5.6 $\pm$ 20%	13.7	3.32	0.0055	0.57
RL-8500-1-6.8	6.8 $\pm$ 20%	13.1	3.91	0.0060	0.57
RL-8500-1-8.2	8.2 $\pm$ 20%	12.6	4.68	0.0065	0.57
RL-8500-1-10	10.0 $\pm$ 10%	11.7	5.85	0.0070	0.57
RL-8500-1-12	12.0 $\pm$ 10%	11.3	6.84	0.0080	0.57
RL-8500-1-15	15.0 $\pm$ 10%	10.7	8.23	0.0090	0.57
RL-8500-1-18	18.0 $\pm$ 10%	10.2	9.63	0.0100	0.57
RL-8500-1-22	22.0 $\pm$ 10%	9.7	11.43	0.0110	0.57
RL-8500-1-27	27.0 $\pm$ 10%	8.2	14.40	0.0140	0.54
RL-8500-1-33	33.0 $\pm$ 10%	7.0	18.09	0.0190	0.54
RL-8500-1-39	39.0 $\pm$ 10%	6.8	20.88	0.0200	0.62
RL-8500-1-47	47.0 $\pm$ 10%	6.5	24.48	0.0240	0.62
RL-8500-1-56	56.0 $\pm$ 10%	6.2	28.49	0.0260	0.62
RL-8500-1-68	68.0 $\pm$ 10%	5.9	33.39	0.0290	0.62
RL-8500-1-82	82.0 $\pm$ 10%	5.6	39.06	0.0300	0.62
RL-8500-1-100	100.0 $\pm$ 10%	5.4	46.26	0.0350	0.62
RL-8500-1-120	120.0 $\pm$ 10%	5.1	53.64	0.0430	0.62
RL-8500-1-150	150.0 $\pm$ 10%	4.3	69.57	0.0520	0.59
RL-8500-1-180	180.0 $\pm$ 10%	3.7	86.67	0.0660	0.60
RL-8500-1-220	220.0 $\pm$ 10%	3.5	102.42	0.0740	0.60
RL-8500-1-270	270.0 $\pm$ 10%	3.4	121.41	0.0820	0.60
RL-8500-1-330	330.0 $\pm$ 10%	3.2	143.55	0.0900	0.60
RL-8500-1-390	390.0 $\pm$ 10%	3.1	164.61	0.1080	0.60
RL-8500-1-470	470.0 $\pm$ 10%	2.6	207.36	0.1330	0.57
RL-8500-1-560	560.0 $\pm$ 10%	2.5	241.20	0.1500	0.57
RL-8500-1-680	680.0 $\pm$ 10%	2.1	303.39	0.2020	0.54
RL-8500-1-820	820.0 $\pm$ 10%	2.0	354.69	0.2300	0.60
RL-8500-1-1000	1000.0 $\pm$ 10%	1.9	417.33	0.2800	0.60

NOTES:

1. ELECTRICAL SPECIFICATIONS MEASURED AT 25°C
2. Irms - CURRENT THAT CAUSES THE TEMPERATURE TO RISE
APPROX. 30°C ABOVE AMBIENT OF 25°C
3. RESISTANCE TO SOLDER HEAT: 260°C 10 SECONDS
4. INDUCTANCE TESTED AT 10 kHz, 0.1Vrms



RENCO ELECTRONICS INC.

595 International Place, Rockledge, FL 32955-4200 USA • www.rencousa.com • ISO 9001 Certified
Toll Free Engineering Hot Line: 800.645.5828 • P: 321.637.1000 • F: 321.637.1600



RL-8500-2

Renco Part No. RL-8500-2	Inductance (μ H)	Irms (A)	L (μ H) @ Rated Irms	DCR Max. (Ohms)	DIM. C Max.
RL-8500-2-1.0	1.0 $\pm$ 30%	25.4	0.72	0.0026	0.82
RL-8500-2-1.2	1.2 $\pm$ 30%	25.4	0.88	0.0030	0.82
RL-8500-2-1.5	1.5 $\pm$ 30%	22.0	1.04	0.0030	0.82
RL-8500-2-1.8	1.8 $\pm$ 30%	22.0	1.20	0.0030	0.82
RL-8500-2-2.2	2.2 $\pm$ 20%	19.7	1.44	0.0035	0.82
RL-8500-2-2.7	2.7 $\pm$ 20%	19.7	1.76	0.0045	0.82
RL-8500-2-3.3	3.3 $\pm$ 20%	18.0	2.08	0.0045	0.82
RL-8500-2-3.9	3.9 $\pm$ 20%	18.0	2.48	0.0050	0.82
RL-8500-2-4.7	4.7 $\pm$ 20%	16.6	2.96	0.0055	0.82
RL-8500-2-5.6	5.6 $\pm$ 20%	15.8	3.36	0.0055	0.82
RL-8500-2-6.8	6.8 $\pm$ 20%	14.7	4.00	0.0065	0.82
RL-8500-2-8.2	8.2 $\pm$ 20%	14.7	4.88	0.0065	0.82
RL-8500-2-10	10.0 $\pm$ 10%	13.9	6.48	0.0070	0.82
RL-8500-2-12	12.0 $\pm$ 10%	12.7	7.47	0.0080	0.82
RL-8500-2-15	15.0 $\pm$ 10%	12.2	9.18	0.0090	0.82
RL-8500-2-18	18.0 $\pm$ 10%	11.8	10.80	0.0090	0.82
RL-8500-2-22	22.0 $\pm$ 10%	11.0	12.78	0.0110	0.82
RL-8500-2-27	27.0 $\pm$ 10%	10.4	15.21	0.0120	0.82
RL-8500-2-33	33.0 $\pm$ 10%	10.1	18.27	0.0130	0.82
RL-8500-2-39	39.0 $\pm$ 10%	9.6	20.97	0.0140	0.82
RL-8500-2-47	47.0 $\pm$ 10%	8.2	26.28	0.0190	0.79
RL-8500-2-56	56.0 $\pm$ 10%	7.9	30.51	0.0210	0.79
RL-8500-2-68	68.0 $\pm$ 10%	6.7	37.98	0.0290	0.77
RL-8500-2-82	82.0 $\pm$ 10%	6.4	36.45	0.0320	0.87
RL-8500-2-100	100.0 $\pm$ 10%	6.1	52.83	0.0350	0.87
RL-8500-2-120	120.0 $\pm$ 10%	5.8	61.29	0.0390	0.87
RL-8500-2-150	150.0 $\pm$ 10%	5.5	74.25	0.0430	0.87
RL-8500-2-180	180.0 $\pm$ 10%	5.3	86.58	0.0500	0.83
RL-8500-2-220	220.0 $\pm$ 10%	5.0	102.33	0.0560	0.83
RL-8500-2-270	270.0 $\pm$ 10%	4.2	130.05	0.0770	0.80
RL-8500-2-330	330.0 $\pm$ 10%	3.6	165.06	0.1000	0.80
RL-8500-2-390	390.0 $\pm$ 10%	3.5	190.44	0.1080	0.80
RL-8500-2-470	470.0 $\pm$ 10%	3.3	222.59	0.1350	0.85
RL-8500-2-560	560.0 $\pm$ 10%	3.2	259.20	0.1500	0.85
RL-8500-2-680	680.0 $\pm$ 10%	3.0	302.67	0.1650	0.85
RL-8500-2-820	820.0 $\pm$ 10%	2.9	353.25	0.1800	0.85
RL-8500-2-1000	1000.0 $\pm$ 10%	2.5	449.23	0.2300	0.85

NOTES:

1. ELECTRICAL SPECIFICATIONS MEASURED AT 25°C
2. Irms - CURRENT THAT CAUSES THE TEMPERATURE TO RISE
APPROX. 30°C ABOVE AMBIENT OF 25°C
3. RESISTANCE TO SOLDER HEAT: 260°C 10 SECONDS
4. INDUCTANCE TESTED AT 10 kHz, 0.1Vrms



RENCO ELECTRONICS INC.

595 International Place, Rockledge, FL 32955-4200 USA • www.rencousa.com • ISO 9001 Certified
Toll Free Engineering Hot Line: 800.645.5828 • P: 321.637.1000 • F: 321.637.1600

