



RLD-7500-0

RLD-7500-1, RLD-7500-2, RLD-7500-3 SHIELDED DUAL WINDING SMD POWER INDUCTORS

DESCRIPTION

- Shielded SMD Power Inductors
- Dual Winding (1:1 Turns Ratio)

ENVIRONMENTAL DATA

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

PACKAGING INFORMATION

- Packaging information: pg. 504

FEATURES & APPLICATIONS

- Magnetic shielded surface mount inductor with high current rating
- Can use in series for high inductance or in parallel for high current
- Excellent for power line DC-DC conversion applications used in notebook computers and other electronic equipment
- Input/output filtering
- Buck, boost or coupled inductor
- Sepic or flyback topology

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

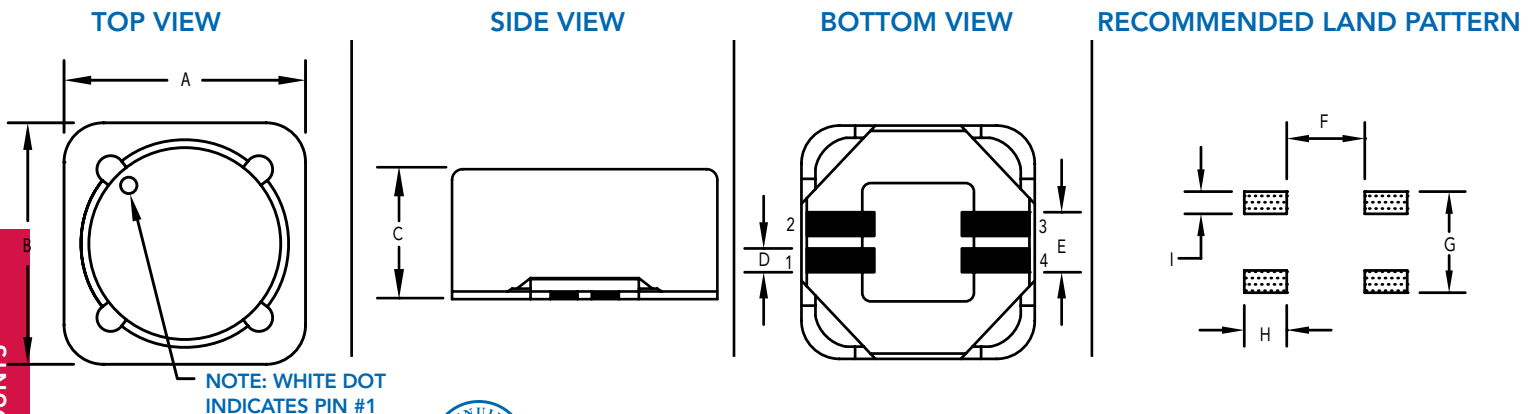
MECHANICAL DIMENSIONS

U.S. Standard (mm)

PART NUMBER	A (MAX.)	B (MAX.)	C (MAX.)	D (REF.)	E (REF.)	F (REF.)	G (REF.)
RLD-7500-0	0.295 (7.50)	0.295 (7.50)	0.138 (3.50)	0.028 (0.70)	0.109 (2.70)	0.169 (4.30)	0.114 (2.90)
RLD-7500-1	0.295 (7.50)	0.295 (7.50)	0.175 (4.45)	0.028 (0.70)	0.109 (2.70)	0.169 (4.30)	0.114 (2.90)
RLD-7500-2	0.504 (12.80)	0.504 (12.80)	0.236 (6.00)	0.066 (1.70)	0.196 (5.00)	0.276 (7.00)	0.213 (5.40)
RLD-7500-3	0.504 (12.80)	0.504 (12.80)	0.314 (8.00)	0.066 (1.70)	0.196 (5.00)	0.276 (7.00)	0.213 (5.40)

PART NUMBER	PART WEIGHT
RLD-7500-0	3.0g (0.11oz)
RLD-7500-1	3.0g (0.11oz)
RLD-7500-2	3.0g (0.11oz)
RLD-7500-3	4.0g (0.14oz)

H (REF.)	I (REF.)
0.057 (1.45)	0.035 (0.90)
0.057 (1.45)	0.035 (0.90)
0.110 (2.80)	0.083 (2.10)
0.110 (2.80)	0.083 (2.10)



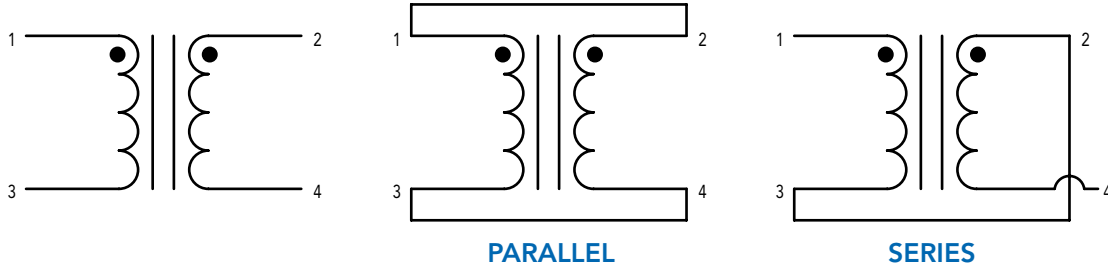
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RLD-7500-0

SCHEMATIC



Renco Part No. RLD-7500-0	Inductance (μ H)	PARALLEL				SERIES			
		Inductance (μ H) Ref.	DCR Max. (Ohms)	Isat (A)	Irms (A)	Inductance (μ H) Ref.	DCR Max. (Ohms)	Isat (A)	Irms (A)
RLD-7500-0-1R0Y	1.00 \pm 30%	0.992	0.0104	7.97	5.25	3.968	0.0430	3.99	2.630
RLD-7500-0-1R5Y	1.50 \pm 30%	1.482	0.0130	6.52	4.64	5.928	0.0494	3.26	2.320
RLD-7500-0-2R2Y	2.20 \pm 30%	2.070	0.0210	5.52	4.11	8.280	0.0676	2.76	2.060
RLD-7500-0-3R3Y	3.30 \pm 30%	3.540	0.0283	4.22	3.31	14.160	0.1148	2.11	1.660
RLD-7500-0-4R7Y	4.70 \pm 30%	4.422	0.0366	3.78	3.09	17.690	0.1561	1.89	1.550
RLD-7500-0-6R8Y	6.80 \pm 30%	6.480	0.0558	3.12	2.55	25.920	0.2292	1.56	1.280
RLD-7500-0-8R2Y	8.20 \pm 30%	8.930	0.0591	2.66	2.19	35.720	0.2390	1.33	1.100
RLD-7500-0-100M	10.00 \pm 20%	10.300	0.0800	2.47	2.08	41.200	0.3276	1.24	1.040
RLD-7500-0-150M	15.00 \pm 20%	15.010	0.1099	2.05	1.83	60.040	0.4380	1.03	0.916
RLD-7500-0-220M	22.00 \pm 20%	22.650	0.1620	1.67	1.62	90.600	0.6528	0.83	0.811
RLD-7500-0-330M	33.00 \pm 20%	34.410	0.2300	1.35	1.31	137.600	0.9180	0.68	0.653
RLD-7500-0-470M	47.00 \pm 20%	48.620	0.3156	1.14	1.03	194.500	1.2552	0.57	0.500
RLD-7500-0-680M	68.00 \pm 20%	69.690	0.4404	0.96	0.89	275.600	1.7532	0.48	0.444
RLD-7500-0-820M	82.00 \pm 20%	80.370	0.5772	0.89	0.71	321.500	2.3418	0.44	0.351
RLD-7500-0-101M	100.00 \pm 20%	101.400	0.8352	0.79	0.63	405.600	3.3912	0.39	0.312
RLD-7500-0-151M	150.00 \pm 20%	150.900	1.5360	0.65	0.50	603.600	6.0516	0.32	0.245
RLD-7500-0-221M	220.00 \pm 20%	223.300	1.6608	0.53	0.47	893.200	6.7212	0.27	0.232
RLD-7500-0-331M	330.00 \pm 20%	325.500	2.6952	0.44	0.37	1302.00	10.6700	0.22	0.185
RLD-7500-0-471M	470.00 \pm 20%	465.800	3.3504	0.37	0.34	1863.000	13.7040	0.18	0.168
RLD-7500-0-681M	680.00 \pm 20%	676.500	5.3967	0.31	0.25	2706.000	21.2970	0.15	0.123
RLD-7500-0-821M	820.00 \pm 20%	821.700	6.0912	0.28	0.23	3287.000	24.3120	0.14	0.112
RLD-7500-0-102M	1000.00 \pm 20%	995.000	9.3492	0.25	0.19	3980.000	37.0080	0.13	0.093

NOTES:

1. Isat - DC CURRENT THAT WILL CAUSE INDUCTANCE TO DROP BY 30%
2. Irms - CURRENT THAT CAUSES THE TEMPERATURE TO RISE APPROX. 40°C ABOVE AMBIENT OF 25°C
3. ELECTRICAL SPECIFICATIONS MEASURED AT 25°C
4. INDUCTANCE TESTED AT 100 kHz, 0.1 Vrms



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RLD-7500-1

Renco Part No. RLD-7500-1	Inductance (μ H)	PARALLEL				SERIES			
		Inductance (μ H) Ref.	DCR Max. (Ohms)	Isat (A)	Irms (A)	Inductance (μ H) Ref.	DCR Max. (Ohms)	Isat (A)	Irms (A)
RLD-7500-1-R80Y	0.80 \pm 30%	0.752	0.0132	10.20	5.33	3.008	0.0528	5.100	2.660
RLD-7500-1-1R5Y	1.50 \pm 30%	1.422	0.0188	7.00	4.96	5.688	0.0752	3.800	2.480
RLD-7500-1-2R2Y	2.20 \pm 30%	1.986	0.0204	6.60	4.66	7.944	0.0816	3.380	2.330
RLD-7500-1-3R3Y	3.30 \pm 30%	3.396	0.0258	5.20	3.94	13.580	0.1032	2.500	1.970
RLD-7500-1-4R7Y	4.70 \pm 30%	5.182	0.0354	4.37	3.34	20.730	0.1416	2.150	1.670
RLD-7500-1-6R8Y	6.80 \pm 30%	7.344	0.0492	3.50	2.60	29.380	0.1968	1.750	1.300
RLD-7500-1-8R2Y	8.20 \pm 30%	8.566	0.0564	3.20	2.53	34.260	0.2256	1.580	1.270
RLD-7500-1-100M	10.00 \pm 30%	9.882	0.0606	3.05	2.41	39.530	0.2424	1.500	1.200
RLD-7500-1-150M	15.00 \pm 20%	16.090	0.0948	2.40	2.00	64.360	0.3792	1.200	1.000
RLD-7500-1-220M	22.00 \pm 20%	21.730	0.1272	1.95	1.75	86.920	0.5088	1.020	0.874
RLD-7500-1-330M	33.00 \pm 20%	33.010	0.2052	1.60	1.30	132.000	0.8208	0.810	0.650
RLD-7500-1-470M	47.00 \pm 20%	49.640	0.2940	1.32	1.05	198.600	1.1760	0.670	0.525
RLD-7500-1-680M	68.00 \pm 20%	69.670	0.4056	1.18	0.95	278.700	1.6224	0.590	0.475
RLD-7500-1-820M	82.00 \pm 20%	80.950	0.4920	1.09	0.83	323.800	1.9680	0.550	0.415
RLD-7500-1-101M	100.00 \pm 20%	101.600	0.5736	0.96	0.75	406.400	2.2944	0.480	0.375
RLD-7500-1-151M	150.00 \pm 20%	150.000	0.8352	0.78	0.60	600.000	3.3408	0.390	0.300
RLD-7500-1-221M	220.00 \pm 20%	227.000	1.2191	0.65	0.50	908.000	4.8766	0.320	0.250
RLD-7500-1-331M	330.00 \pm 20%	335.600	2.1720	0.53	0.40	1342.000	8.6880	0.250	0.200
RLD-7500-1-471M	470.00 \pm 20%	465.300	2.6520	0.46	0.35	1861.000	10.6080	0.220	0.175
RLD-7500-1-681M	680.00 \pm 20%	671.200	4.2480	0.37	0.28	2685.000	16.9920	0.175	0.140
RLD-7500-1-821M	820.00 \pm 20%	812.700	4.6680	0.35	0.26	3251.000	18.6720	0.170	0.130
RLD-7500-1-102M	1000.00 \pm 20%	1009.000	5.1840	0.31	0.24	4036.000	20.7360	0.160	0.120

NOTES:

1. Isat - DC CURRENT THAT WILL CAUSE INDUCTANCE TO DROP BY 30%
2. Irms - CURRENT THAT CAUSES THE TEMPERATURE TO RISE APPROX. 40°C ABOVE AMBIENT OF 25°C
3. ELECTRICAL SPECIFICATIONS MEASURED AT 25°C
4. INDUCTANCE TESTED AT 100 kHz, 0.1 Vrms



RLD-7500-2

Renco Part No. RLD-7500-2	Inductance (μ H)	PARALLEL				SERIES			
		Inductance (μ H) Ref.	DCR Max. (Ohms)	Isat (A)	Irms (A)	Inductance (μ H) Ref.	DCR Max. (Ohms)	Isat (A)	Irms (A)
RLD-7500-2-R56Y	0.56 \pm 30%	0.540	0.0043	25.00	9.50	2.100	0.0160	12.50	5.00
RLD-7500-2-1R0Y	1.00 \pm 30%	0.984	0.0050	19.00	8.50	3.576	0.0200	9.20	4.60
RLD-7500-2-1R5Y	1.50 \pm 30%	1.478	0.0060	12.50	8.20	5.912	0.0245	7.00	4.00
RLD-7500-2-2R2Y	2.20 \pm 30%	2.208	0.0075	12.00	8.00	8.832	0.0290	6.00	3.80
RLD-7500-2-3R3Y	3.30 \pm 30%	3.084	0.0095	10.20	4.80	12.340	0.0380	5.00	3.20
RLD-7500-2-4R5Y	4.50 \pm 30%	4.250	0.0105	9.00	4.60	16.510	0.0410	4.50	2.80
RLD-7500-2-6R8Y	6.80 \pm 30%	6.588	0.0165	7.00	4.30	26.350	0.0640	3.50	2.30
RLD-7500-2-8R2Y	8.20 \pm 30%	8.048	0.0180	6.50	4.00	32.190	0.0700	3.10	2.00
RLD-7500-2-100M	10.00 \pm 20%	9.654	0.0224	5.70	3.70	38.620	0.0895	2.80	1.80
RLD-7500-2-150M	15.00 \pm 20%	15.350	0.0298	4.70	3.30	61.400	0.1190	2.30	1.65
RLD-7500-2-220M	22.00 \pm 20%	22.360	0.0420	3.65	3.00	89.440	0.1720	1.80	1.52
RLD-7500-2-330M	33.00 \pm 20%	33.740	0.0600	3.10	2.70	135.000	0.2460	1.55	1.30
RLD-7500-2-470M	47.00 \pm 20%	47.470	0.0810	2.60	2.20	189.900	0.3250	1.35	0.10
RLD-7500-2-680M	68.00 \pm 20%	67.910	0.1180	2.20	1.80	271.000	0.4600	1.10	0.80
RLD-7500-2-820M	82.00 \pm 20%	86.890	0.1400	2.00	1.60	347.600	0.5580	1.00	0.75
RLD-7500-2-101M	100.00 \pm 20%	102.700	0.1830	1.75	1.40	410.800	0.7280	0.90	0.50
RLD-7500-2-151M	150.00 \pm 20%	151.100	0.2640	1.50	1.10	604.400	1.0500	0.75	0.45
RLD-7500-2-221M	220.00 \pm 20%	216.800	0.3760	1.20	0.90	867.200	1.4900	0.60	0.38
RLD-7500-2-331M	330.00 \pm 20%	332.600	0.5600	1.00	0.70	1330.000	2.2400	0.48	0.35
RLD-7500-2-471M	470.00 \pm 20%	473.100	0.7740	0.82	0.55	1892.000	3.1000	0.38	0.30
RLD-7500-2-681M	680.00 \pm 20%	679.800	1.1450	0.71	0.45	2719.000	4.5800	0.33	0.27
RLD-7500-2-821M	820.00 \pm 20%	828.000	1.4590	0.63	0.38	3312.000	5.8400	0.31	0.20
RLD-7500-2-102M	1000.00 \pm 20%	975.200	1.6600	0.60	0.28	4032.000	6.6600	0.29	0.18

NOTES:

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2. Irms - CURRENT THAT CAUSES THE TEMPERATURE TO RISE APPROX. 40°C ABOVE AMBIENT OF 25°C
3. ELECTRICAL SPECIFICATIONS MEASURED AT 25°C
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RLD-7500-3

Renco Part No. RLD-7500-3	Inductance (μ H)	PARALLEL				SERIES			
		Inductance (μ H) Ref.	DCR Max. (Ohms)	Isat (A)	Irms (A)	Inductance (μ H) Ref.	DCR Max. (Ohms)	Isat (A)	Irms (A)
RLD-7500-3-R50Y	0.500 \pm 30%	0.520	0.0058	35.00	13.50	1.900	0.0260	18.00	6.720
RLD-7500-3-1R0Y	1.000 \pm 30%	0.821	0.0085	24.00	10.00	3.284	0.0374	12.00	5.000
RLD-7500-3-1R5Y	1.500 \pm 30%	1.357	0.0106	19.00	8.60	5.428	0.0450	9.20	4.300
RLD-7500-3-2R2Y	2.200 \pm 30%	2.027	0.0127	16.00	8.30	8.108	0.0522	7.60	4.150
RLD-7500-3-3R3Y	3.300 \pm 30%	2.831	0.0138	14.00	8.30	11.320	0.0570	7.20	4.150
RLD-7500-3-4R5Y	4.500 \pm 30%	4.380	0.0169	11.80	6.50	17.520	0.0697	5.90	3.250
RLD-7500-3-6R8Y	6.800 \pm 30%	7.387	0.0206	9.70	5.50	29.550	0.0899	4.70	2.750
RLD-7500-3-8R2Y	8.200 \pm 30%	8.861	0.0223	8.50	5.30	35.440	0.0949	4.15	2.650
RLD-7500-3-100M	10.000 \pm 20%	10.470	0.0238	7.50	5.20	41.880	0.1016	3.80	2.600
RLD-7500-3-150M	15.000 \pm 20%	14.090	0.0301	6.00	4.30	56.360	0.1258	2.95	2.150
RLD-7500-3-220M	22.000 \pm 20%	22.930	0.0391	5.25	4.00	91.720	0.1570	2.60	2.000
RLD-7500-3-330M	33.000 \pm 20%	33.920	0.0600	4.15	3.23	135.700	0.2410	2.10	1.610
RLD-7500-3-470M	47.000 \pm 20%	47.050	0.0719	3.50	2.95	188.200	0.2880	1.80	1.470
RLD-7500-3-680M	68.000 \pm 20%	66.480	0.1050	2.95	2.44	265.900	0.4210	1.50	1.220
RLD-7500-3-820M	82.000 \pm 20%	79.750	0.1430	2.75	2.09	319.000	0.5730	1.40	1.040
RLD-7500-3-101M	100.000 \pm 20%	99.310	0.1630	2.56	1.96	397.200	0.6530	1.28	0.980
RLD-7500-3-151M	150.000 \pm 20%	144.900	0.2470	2.10	1.59	579.600	0.9890	1.05	0.796
RLD-7500-3-221M	220.000 \pm 20%	221.500	0.3760	1.64	1.29	886.000	1.5000	0.84	0.645
RLD-7500-3-331M	330.000 \pm 20%	323.600	0.5740	1.40	1.04	1294.000	2.3000	0.72	0.522
RLD-7500-3-471M	470.000 \pm 20%	467.100	0.8610	1.17	0.85	1868.000	3.4400	0.55	0.427
RLD-7500-3-681M	680.000 \pm 20%	676.700	1.0800	0.93	0.76	2707.000	4.3200	0.43	0.380
RLD-7500-3-821M	820.000 \pm 20%	818.100	1.4700	0.86	0.65	3272.000	5.8800	0.41	0.325
RLD-7500-3-102M	1000.00 \pm 20%	1005.000	1.6600	0.75	0.61	4637.000	6.6400	0.35	0.307

NOTES:

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2. Irms - CURRENT THAT CAUSES THE TEMPERATURE TO RISE APPROX. 40°C ABOVE AMBIENT OF 25°C
3. ELECTRICAL SPECIFICATIONS MEASURED AT 25°C
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