

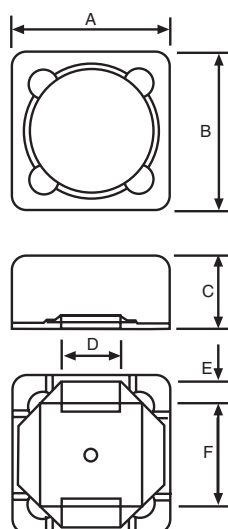


DESIGNER KIT AVAILABLE
Order on-line P/N RL-7500-DK

RL-7500-0

RL-7500-1, RL-7500-2, RL-7500-3

SHIELDED HIGH CURRENT SMD POWER INDUCTORS



FEATURES

- Magnetic shielded surface mount inductor with high current rating.
- Low resistance to keep power loss at a minimum.

APPLICATIONS

Excellent for power line DC-DC conversion applications used in hard disk, notebook computers and other electronic equipment.

MATERIALS CONSTRUCTION

- a. Core: Ferrite DR Core
- b. Core: Ferrite RI Core
- c. Base: LCP E4008
- d. Wire: Enameled Copper Wire
- e. Tape: Mylar Tape
- f. Terminal: Tinned Copper Plate
- g. Adhesive: Epoxy Resin

GENERAL SPECIFICATIONS

Temperature rise: 40°C Typical at I_{dc}

Rated current: Based on temperature rise and
 $\Delta L/LOA = 20\% \text{ Max.}$

Operating Temperature: -25°C to +85°C

Storage Temperature: -40°C to +105°C

Resistance to solder heat: 260°C for 10 seconds

TAPE AND REEL PACKAGING

Part Number	Pieces per reel	Plastic reel size
RL-7500-0	800	13"
RL-7500-1	600	13"
RL-7500-2	600	13"
RL-7500-3	400	13"

MECHANICAL DIMENSION (m/m)

Part Number	A	B	C	D	E	F	G (Ref)	H (Ref)	I (Ref)
RL-7500-0	12.50±0.3	12.50±0.3	3.9 Max	5.00±0.2	2.20±0.2	7.60±0.2	7.0	5.4	2.8
RL-7500-1	12.50±0.3	12.50±0.3	4.6 Max	5.00±0.2	2.20±0.2	7.60±0.2	7.0	5.4	2.8
RL-7500-2	12.50±0.3	12.50±0.3	6.0 Max	5.00±0.2	2.20±0.2	7.60±0.2	7.0	5.4	2.8
RL-7500-3	12.50±0.3	12.50±0.3	8.0 Max	5.00±0.2	2.20±0.2	7.60±0.2	7.0	5.4	2.8



RENCO ELECTRONICS, INC.

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Renco Part Number	Inductance (μ H)	Testing Freq. (Hz)	DCR (Ω) Max.	IDC (A) Max.
RL-7500-0-1R5M	1.5 $\pm$ 20%	1V / 100K	0.013	7.80
RL-7500-0-2R2M	2.2 $\pm$ 20%	1V / 100K	0.015	6.80
RL-7500-0-3R9M	3.9 $\pm$ 20%	1V / 100K	0.026	5.50
RL-7500-0-5R6M	5.6 $\pm$ 20%	1V / 100K	0.032	4.80
RL-7500-0-8R2M	8.2 $\pm$ 20%	1V / 100K	0.045	4.10
RL-7500-0-100M	10.0 $\pm$ 20%	1V / 100K	0.050	3.90
RL-7500-0-120M	12.0 $\pm$ 20%	1V / 100K	0.060	3.50
RL-7500-0-150M	15.0 $\pm$ 20%	1V / 100K	0.080	3.00
RL-7500-0-180M	18.0 $\pm$ 20%	1V / 100K	0.100	2.70
RL-7500-0-220M	22.0 $\pm$ 20%	1V / 100K	0.110	2.50
RL-7500-0-270M	27.0 $\pm$ 20%	1V / 100K	0.130	2.20
RL-7500-0-330M	33.0 $\pm$ 20%	1V / 100K	0.160	2.10
RL-7500-0-390M	39.0 $\pm$ 20%	1V / 100K	0.180	2.00
RL-7500-0-470M	47.0 $\pm$ 20%	1V / 100K	0.220	1.80
RL-7500-0-560M	56.0 $\pm$ 20%	1V / 100K	0.260	1.60
RL-7500-0-680M	68.0 $\pm$ 20%	1V / 100K	0.310	1.50
RL-7500-0-820M	82.0 $\pm$ 20%	1V / 100K	0.360	1.40
RL-7500-0-101M	100.0 $\pm$ 20%	1V / 100K	0.400	1.30
RL-7500-0-121M	120.0 $\pm$ 20%	1V / 100K	0.530	1.10
RL-7500-0-151M	150.0 $\pm$ 20%	1V / 100K	0.610	1.00
RL-7500-0-181M	180.0 $\pm$ 20%	1V / 100K	0.800	0.90
RL-7500-0-221M	220.0 $\pm$ 20%	1V / 100K	0.970	0.85
RL-7500-0-271M	270.0 $\pm$ 20%	1V / 100K	1.200	0.75
RL-7500-0-331M	330.0 $\pm$ 20%	1V / 100K	1.350	0.70

Note:

1. Inductance measured by LCR meter HP 4294 / HP4291
2. DCR measured by Milliohm meter CH 502AC



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RL-7500-1-3R3M	3.3 $\pm$ 20%	1V / 100K	0.015	6.50
RL-7500-1-4R7M	4.7 $\pm$ 20%	1V / 100K	0.018	5.70
RL-7500-1-6R8M	6.8 $\pm$ 20%	1V / 100K	0.023	4.90
RL-7500-1-100M	10 $\pm$ 20%	1V / 100K	0.028	4.50
RL-7500-1-120M	12 $\pm$ 20%	1V / 100K	0.038	4.00
RL-7500-1-150M	15 $\pm$ 20%	1V / 100K	0.052	3.20
RL-7500-1-180M	18 $\pm$ 20%	1V / 100K	0.060	3.10
RL-7500-1-220M	22 $\pm$ 20%	1V / 100K	0.070	2.90
RL-7500-1-270M	27 $\pm$ 20%	1V / 100K	0.080	2.80
RL-7500-1-330M	33 $\pm$ 20%	1V / 100K	0.097	2.70
RL-7500-1-390M	39 $\pm$ 20%	1V / 100K	0.132	2.10
RL-7500-1-470M	47 $\pm$ 20%	1V / 100K	0.150	1.90
RL-7500-1-560M	56 $\pm$ 20%	1V / 100K	0.190	1.80
RL-7500-1-680M	68 $\pm$ 20%	1V / 100K	0.220	1.50
RL-7500-1-820M	82 $\pm$ 20%	1V / 100K	0.260	1.30
RL-7500-1-101M	100 $\pm$ 20%	1V / 100K	0.308	1.20
RL-7500-1-121M	120 $\pm$ 20%	1V / 100K	0.380	1.10
RL-7500-1-151M	150 $\pm$ 20%	1V / 100K	0.520	0.95
RL-7500-1-181M	180 $\pm$ 20%	1V / 100K	0.600	0.85
RL-7500-1-221M	220 $\pm$ 20%	1V / 100K	0.700	0.80
RL-7500-1-271M	270 $\pm$ 20%	1V / 100K	0.860	0.60
RL-7500-1-331M	330 $\pm$ 20%	1V / 100K	0.980	0.50

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Renco Part Number	Inductance (μ H)	Testing Freq. (Hz)	DCR (Ω) Max.	IDC (A) Max.
RL-7500-2-1R5Y	1.5 $\pm$ 25%	1V / 100K	0.012	8.00
RL-7500-2-2R2Y	2.2 $\pm$ 25%	1V / 100K	0.014	7.00
RL-7500-2-3R1Y	3.1 $\pm$ 25%	1V / 100K	0.017	6.00
RL-7500-2-4R4Y	4.4 $\pm$ 25%	1V / 100K	0.020	5.00
RL-7500-2-5R2Y	5.2 $\pm$ 25%	1V / 100K	0.021	4.40
RL-7500-2-7R5Y	7.5 $\pm$ 25%	1V / 100K	0.024	4.20
RL-7500-2-100M	10 $\pm$ 20%	1V / 1K	0.025	4.00
RL-7500-2-120M	12 $\pm$ 20%	1V / 1K	0.027	3.50
RL-7500-2-150M	15 $\pm$ 20%	1V / 1K	0.030	3.30
RL-7500-2-180M	18 $\pm$ 20%	1V / 1K	0.034	3.00
RL-7500-2-220M	22 $\pm$ 20%	1V / 1K	0.036	2.80
RL-7500-2-270M	27 $\pm$ 20%	1V / 1K	0.051	2.30
RL-7500-2-330M	33 $\pm$ 20%	1V / 1K	0.057	2.10
RL-7500-2-390M	39 $\pm$ 20%	1V / 1K	0.068	2.00
RL-7500-2-470M	47 $\pm$ 20%	1V / 1K	0.075	1.80
RL-7500-2-560M	56 $\pm$ 20%	1V / 1K	0.110	1.70
RL-7500-2-680M	68 $\pm$ 20%	1V / 1K	0.120	1.50
RL-7500-2-820M	82 $\pm$ 20%	1V / 1K	0.140	1.40
RL-7500-2-101M	100 $\pm$ 20%	1V / 1K	0.160	1.30
RL-7500-2-121M	120 $\pm$ 20%	1V / 1K	0.170	1.10
RL-7500-2-151M	150 $\pm$ 20%	1V / 1K	0.230	1.00
RL-7500-2-181M	180 $\pm$ 20%	1V / 1K	0.290	0.90
RL-7500-2-221M	220 $\pm$ 20%	1V / 1K	0.400	0.80
RL-7500-2-271M	270 $\pm$ 20%	1V / 1K	0.460	0.75
RL-7500-2-331M	330 $\pm$ 20%	1V / 1K	0.510	0.68
RL-7500-2-391M	390 $\pm$ 20%	1V / 1K	0.690	0.65
RL-7500-2-471M	470 $\pm$ 20%	1V / 1K	0.770	0.58
RL-7500-2-561M	560 $\pm$ 20%	1V / 1K	0.860	0.54
RL-7500-2-681M	680 $\pm$ 20%	1V / 1K	1.200	0.48
RL-7500-2-821M	820 $\pm$ 20%	1V / 1K	1.340	0.43
RL-7500-2-102M	1000 $\pm$ 20%	1V / 1K	1.530	0.40

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Renco Part Number	Inductance (μ H)	Testing Freq. (Hz)	DCR (Ω) Max.	IDC (A) Max.
RL-7500-3-1R2Y	1.2 $\pm$ 30%	1V / 100K	0.0070	9.80
RL-7500-3-2R7Y	2.7 $\pm$ 30%	1V / 100K	0.0115	8.00
RL-7500-3-3R9Y	3.9 $\pm$ 30%	1V / 100K	0.0135	7.50
RL-7500-3-4R7Y	4.7 $\pm$ 30%	1V / 100K	0.0158	6.80
RL-7500-3-5R6Y	5.6 $\pm$ 30%	1V / 100K	0.0176	6.60
RL-7500-3-7R6Y	7.6 $\pm$ 30%	1V / 100K	0.0200	5.90
RL-7500-3-100M	10 $\pm$ 20%	1V / 1K	0.0216	5.40
RL-7500-3-120M	12 $\pm$ 20%	1V / 1K	0.0243	4.90
RL-7500-3-150M	15 $\pm$ 20%	1V / 1K	0.0270	4.50
RL-7500-3-180M	18 $\pm$ 20%	1V / 1K	0.0392	3.90
RL-7500-3-220M	22 $\pm$ 20%	1V / 1K	0.0432	3.60
RL-7500-3-270M	27 $\pm$ 20%	1V / 1K	0.0459	3.40
RL-7500-3-330M	33 $\pm$ 20%	1V / 1K	0.0648	3.00
RL-7500-3-390M	39 $\pm$ 20%	1V / 1K	0.0729	2.75
RL-7500-3-470M	47 $\pm$ 20%	1V / 1K	0.100	2.50
RL-7500-3-560L	56 $\pm$ 15%	1V / 1K	0.110	2.35
RL-7500-3-680L	68 $\pm$ 15%	1V / 1K	0.140	2.10
RL-7500-3-820L	82 $\pm$ 15%	1V / 1K	0.160	1.95
RL-7500-3-101L	100 $\pm$ 15%	1V / 1K	0.220	1.70
RL-7500-3-121L	120 $\pm$ 15%	1V / 1K	0.250	1.60
RL-7500-3-151L	150 $\pm$ 15%	1V / 1K	0.280	1.42
RL-7500-3-181K	180 $\pm$ 10%	1V / 1K	0.350	1.30
RL-7500-3-221K	220 $\pm$ 10%	1V / 1K	0.390	1.16
RL-7500-3-271K	270 $\pm$ 10%	1V / 1K	0.560	1.06
RL-7500-3-331K	330 $\pm$ 10%	1V / 1K	0.640	0.95
RL-7500-3-391K	390 $\pm$ 10%	1V / 1K	0.700	0.88
RL-7500-3-471K	470 $\pm$ 10%	1V / 1K	0.980	0.79
RL-7500-3-561K	560 $\pm$ 10%	1V / 1K	1.070	0.73
RL-7500-3-681K	680 $\pm$ 10%	1V / 1K	1.460	0.67
RL-7500-3-821K	820 $\pm$ 10%	1V / 1K	1.640	0.60
RL-7500-3-102K	1000 $\pm$ 10%	1V / 1K	1.820	0.55

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