



RL-7600-1

RL-7600-2, RL-7600-3, RL-7600-4 ULTRA SUPER LOW PROFILE SMD INDUCTORS

DESCRIPTION

- Low Profile SMD Inductor

ENVIRONMENTAL DATA

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

PACKAGING INFORMATION

- Packaging information: pg. 490

FEATURES & APPLICATIONS

- Constructed in a rugged case to provide optimum pick and place operations
- Low profile, great for applications when space is at a premium
- Excellent as DC-DC converter used in notebook computers, smartphones, cell phones, step-up or step-down converters, and flash memory

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

MECHANICAL DIMENSIONS

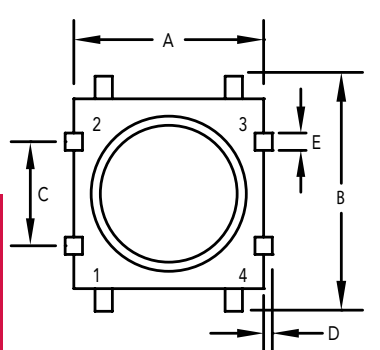
U.S. Standard (mm)

PART NUMBER	A (MAX.)	B (MAX.)	C ±0.004 (0.1)	D ±0.004 (0.1)	E ±0.004 (0.1)	F (MAX.)
RL-7600-1	0.21 (5.30)	0.26 (6.50)	0.12 (3.00)	0.02 (0.50)	0.02 (0.50)	0.04 (1.05)
RL-7600-2	0.21 (5.30)	0.26 (6.50)	0.12 (3.00)	0.02 (0.50)	0.02 (0.50)	0.05 (1.25)
RL-7600-3	0.21 (5.30)	0.26 (6.50)	0.12 (3.00)	0.02 (0.50)	0.02 (0.50)	0.06 (1.55)
RL-7600-4	0.21 (5.30)	0.26 (6.50)	0.12 (3.00)	0.02 (0.50)	0.02 (0.50)	0.10 (2.55)

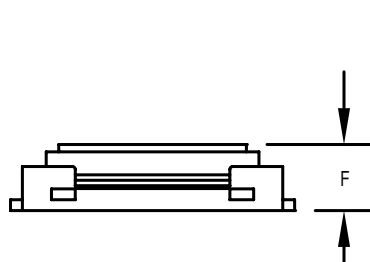
PART NUMBER	PART WEIGHT
RL-7600-1	0.15g (0.005oz)
RL-7600-2	0.15g (0.005oz)
RL-7600-3	0.15g (0.005oz)
RL-7600-4	0.16g (0.006oz)

G (REF.)	H (REF.)	I (REF.)	J (REF.)
0.17 (4.20)	0.02 (0.60)	0.03 (0.80)	0.09 (2.20)
0.17 (4.20)	0.02 (0.60)	0.03 (0.80)	0.09 (2.20)
0.17 (4.20)	0.02 (0.60)	0.03 (0.80)	0.09 (2.20)
0.17 (4.20)	0.02 (0.60)	0.03 (0.80)	0.09 (2.20)

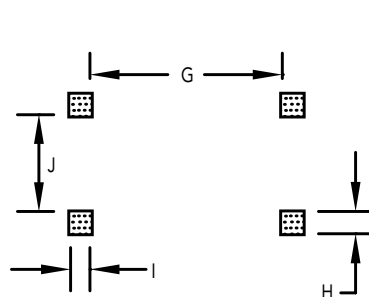
BOTTOM VIEW



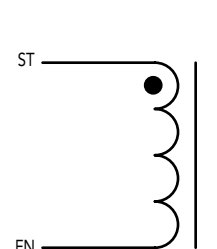
SIDE VIEW



RECOMMENDED LAND PATTERN



SCHEMATIC



RECO ELECTRONICS INC.

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RL-7600-1, RL-7600-2

Renco Part No. RL7600-1	Inductance (μ H)	DCR Max. (Ohms)	Isat (A)	Irms1 (A)	Irms2 (A)
RL-7600-1-2R2M	2.2 $\pm$ 20%	0.18	1.70	0.51	0.76
RL-7600-1-3R3M	3.3 $\pm$ 20%	0.22	1.50	0.46	0.69
RL-7600-1-4R7M	4.7 $\pm$ 20%	0.28	1.32	0.41	0.61
RL-7600-1-6R8M	6.8 $\pm$ 20%	0.38	1.12	0.35	0.52
RL-7600-1-100M	10.0 $\pm$ 20%	0.61	0.90	0.27	0.41
RL-7600-1-150M	15.0 $\pm$ 20%	0.82	0.73	0.24	0.35
RL-7600-1-220M	22.0 $\pm$ 20%	1.10	0.62	0.20	0.31
RL-7600-1-330M	33.0 $\pm$ 20%	1.88	0.52	0.15	0.23
RL-7600-1-470M	47.0 $\pm$ 20%	2.34	0.42	0.14	0.21

* OTHER NON-STANDARD INDUCTANCE VALUES ARE AVAILABLE TO MEET YOUR EXACT REQUIREMENTS

NOTES:

1. Isat - DC CURRENT THAT WILL CAUSE INDUCTANCE TO DROP BY 10%
2. Irms1 - CURRENT THAT CAUSES THE TEMPERATURE TO RISE APPROX. 20°C ABOVE AMBIENT OF 25°C
3. Irms2 - CURRENT THAT CAUSES THE TEMPERATURE TO RISE APPROX. 40°C ABOVE AMBIENT OF 25°C
4. ELECTRICAL SPECIFICATIONS MEASURED AT 25°C
5. INDUCTANCE TESTED AT 100 kHz, 0.1 Vrms

Renco Part No. RL-7600-2	Inductance (μ H)	DCR Max. (Ohms)	Isat (A)	Irms1 (A)	Irms2 (A)
RL-7600-2-2R2M	2.2 $\pm$ 20%	0.18	1.97	0.55	0.82
RL-7600-2-3R3M	3.3 $\pm$ 20%	0.22	1.82	0.50	0.74
RL-7600-2-4R7M	4.7 $\pm$ 20%	0.27	1.54	0.45	0.67
RL-7600-2-6R8M	6.8 $\pm$ 20%	0.37	1.30	0.38	0.57
RL-7600-2-100M	10.0 $\pm$ 20%	0.48	1.10	0.33	0.50
RL-7600-2-150M	15.0 $\pm$ 20%	0.62	0.95	0.29	0.44
RL-7600-2-220M	22.0 $\pm$ 20%	1.00	0.77	0.23	0.35
RL-7600-2-330M	33.0 $\pm$ 20%	1.40	0.60	0.19	0.29
RL-7600-2-470M	47.0 $\pm$ 20%	2.16	0.51	0.15	0.23

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RL-7600-3, RL-7600-4

Renco Part No. RL-7600-3	Inductance (μ H)	DCR Max. (Ohms)	Isat (A)	Irms1 (A)	Irms2 (A)
RL-7600-3-101M	100.0 $\pm$ 20%	3.2	0.50	0.160	0.240
RL-7600-3-151M	150.0 $\pm$ 20%	5.0	0.35	0.130	0.190
RL-7600-3-221M	220.0 $\pm$ 20%	6.5	0.30	0.115	0.170
RL-7600-3-331M	330.0 $\pm$ 20%	12.0	0.22	0.085	0.125
RL-7600-3-471M	470.0 $\pm$ 20%	22.0	0.17	0.060	0.090
RL-7600-3-631M	630.0 $\pm$ 20%	27.0	0.15	0.055	0.080
RL-7600-3-102M	1000.0 $\pm$ 20%	33.0	0.13	0.050	0.075

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3. Irms2 - CURRENT THAT CAUSES THE TEMPERATURE TO RISE APPROX. 40°C ABOVE AMBIENT OF 25°C
4. ELECTRICAL SPECIFICATIONS MEASURED AT 25°C
5. INDUCTANCE TESTED AT 100 kHz, 0.1 Vrms

Renco Part No. RL-7600-4	Inductance (μ H)	DCR Max. (Ohms)	Isat (A)	Irms1 (A)	Irms2 (A)
RL-7600-4-101M	100 $\pm$ 20%	1.6	0.45	0.240	0.360
RL-7600-4-151M	150 $\pm$ 20%	2.5	0.35	0.190	0.290
RL-7600-4-221M	220 $\pm$ 20%	3.8	0.30	0.160	0.230
RL-7600-4-331M	330 $\pm$ 20%	5.9	0.25	0.130	0.190
RL-7600-4-471M	470 $\pm$ 20%	7.5	0.22	0.110	0.170
RL-7600-4-681M	680 $\pm$ 20%	12.0	0.18	0.090	0.130
RL-7600-4-102M	1000 $\pm$ 20%	20.0	0.14	0.070	0.100
RL-7600-4-152M	1500 $\pm$ 20%	25.0	0.12	0.060	0.090
RL-7600-4-222M	2200 $\pm$ 20%	45.0	0.09	0.045	0.065
RL-7600-4-332M	3300 $\pm$ 20%	60.0	0.08	0.040	0.060

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2. Irms1 - CURRENT THAT CAUSES THE TEMPERATURE TO RISE APPROX. 20°C ABOVE AMBIENT OF 25°C
3. Irms2 - CURRENT THAT CAUSES THE TEMPERATURE TO RISE APPROX. 40°C ABOVE AMBIENT OF 25°C
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5. INDUCTANCE TESTED AT 100 kHz, 0.1 Vrms

