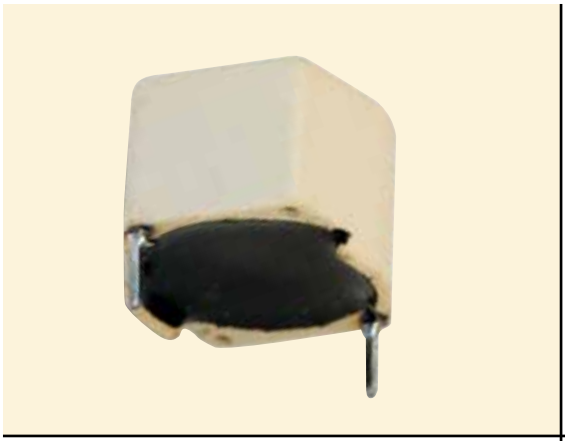


RL-3745

TOROIDAL LOW POWER HORIZONTAL INDUCTOR

DESCRIPTION

- Encapsulated Power Inductor

ENVIRONMENTAL DATA

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

PACKAGING INFORMATION

- Packaging information: pg. 494

FEATURES & APPLICATIONS

- Designed for switched-mode power supplies, filters or general purpose
- Used where high inductor stability is required when rapid load current changes occur
- Offers flexible packaging design since identical inductor values are offered for either vertical mounting having a small PCB footprint or in a low profile form for minimum height

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

MECHANICAL DIMENSIONS

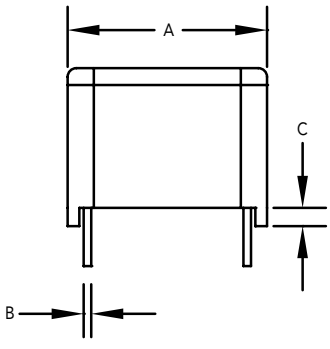
U.S. Standard (mm)

PART NUMBER	A (MAX.)	B (TYP.)	C (TYP.)	D (MIN.)	E (MAX.)	F (MAX.)
RL-3745	0.670 (17.02)	0.026 (0.66)	0.050 (1.27)	0.150 (3.81)	0.670 (17.02)	0.480 (12.20)

PART NUMBER	PART WEIGHT
RL-3745	8.0g (0.28oz)

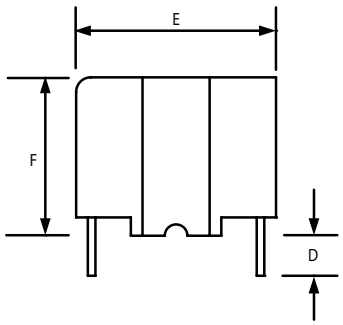
G ±0.005 (0.127)	H ±0.005 (0.127)
0.400 (10.16)	0.600 (15.24)

FRONT VIEW

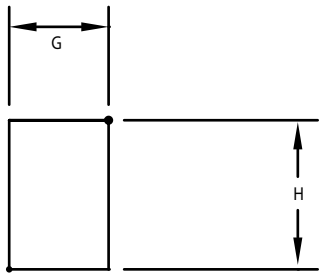


SQ PINS

SIDE VIEW



RECOMMENDED LAND PATTERN



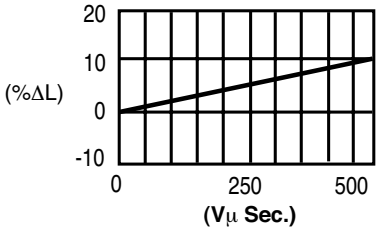
RENCO ELECTRONICS INC.

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

RoHS COMPLIANT

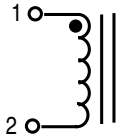
RL-3745

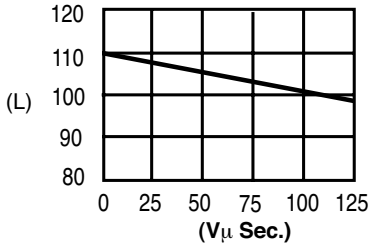
Renco Part No. RL-3745	REFERENCE OPERATING VALUES Inductance (µH) (1)	Isat (A)	Max. ETop (VµSec) (3)	DESIGN CONTROL VALUES Inductance No. D.C. (µH)	1000 Hz Test Volts No D.C.	DCR Max. (Ohms)	Min. Energy Storage (µJ) (2)
RL-3745-150	150.0	1.70	80.0	175.0	0.050	0.36	215.0
RL-3745-220	220.0	1.50	90.0	255.0	0.070	0.38	240.0
RL-3745-330	330.0	1.00	100.0	380.0	0.080	0.74	165.0
RL-3745-470	470.0	0.90	120.0	540.0	0.100	1.10	190.0
RL-3745-680	680.0	0.85	175.0	790.0	0.120	1.25	245.0
RL-3745-820	820.0	0.75	175.0	950.0	0.130	2.30	230.0
RL-3745-1000	1000.0	0.50	175.0	1150.0	0.140	2.40	125.0



INDUCTANCE VARIANCE VS. ETop

TYPICAL INDUCTANCE CHARCTERISTICS





INDUCTANCE VARIANCE VS. LOAD CURRENT

NOTES:
1. Isat AND ETop VALUES SHOW POINT OF TYPICAL INDUCTANCE
2. RATED FOR 40°C RISE
3. RATED AT CONTINUOUS OPERATION TO 20% OF FULL CURRENT
4. ELECTRICAL SPECIFICATIONS MEASURED AT 25°C
5. INDUCTANCE TESTED AT 10 kHz, 0.1Vrms

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