



RL-5040-H

SMD HIGH CURRENT POWER INDUCTORS

DESCRIPTION

- SMD 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 495

FEATURES & APPLICATIONS

- RL-5040-H series is one of the highest power, pick and place, surface mount power inductors on the market
- Self leaded for low DCR
- This series offers fifteen industry standard inductance values up to 1.4mH and current capabilities above 30A
- Ideal for LED drivers and DC-DC converters used in laptop computers, Buck and Boost converters and other electronic equipment

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

MECHANICAL DIMENSIONS

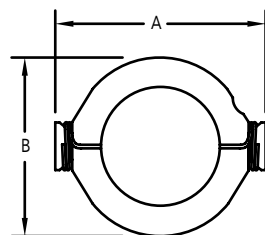
U.S. Standard (mm)

PART NUMBER	A (MAX.)	B (MAX.)	C (MAX.)	D (TYP.)	E (TYP.)	F (TYP.)
RL-5040-H-2.8 to 12	0.88 (22.35)	0.64 (16.25)	0.47 (12.00)	0.125 (3.18)	0.47 (11.94)	0.69 (17.53)

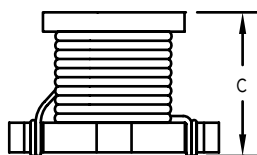
PART NUMBER	A (MAX.)	B (MAX.)	C (MAX.)	D (TYP.)	E (TYP.)	F (TYP.)
RL-5040-H-15 to -1400	0.73 (18.54)	0.60 (15.24)	0.47 (12.00)	0.075 (1.90)	0.25 (6.35)	0.626 (15.90)

PART NUMBER	PART WEIGHT
RL-5040-H	3.0g (0.11oz)

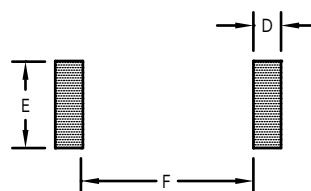
TOP VIEW



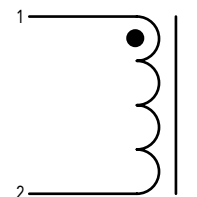
SIDE VIEW



RECOMMENDED PCB LAYOUT



SCHEMATIC



RENCO ELECTRONICS INC.

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Toll Free Engineering Hot Line: 800.645.5828 • P: 321.637.1000 • F: 321.637.1600



RL-5040-H

Renco Part No. RL-5040-H	Inductance (μ H)	SRF (MHz) Typ.	DCR Max. (Ohms)	Isat (A)	Irms (A)
RL-5040-H-2.8	2.8 $\pm$ 20%	65	0.005	33.4	12.1
RL-5040-H-3.9	3.9 $\pm$ 20%	40	0.006	26.8	11.2
RL-5040-H-6.8	6.8 $\pm$ 20%	30	0.009	22.5	9.6
RL-5040-H-10	10.0 $\pm$ 20%	22	0.011	17.8	8.6
RL-5040-H-12	12.0 $\pm$ 20%	21	0.013	15.9	7.4
RL-5040-H-15	15.0 $\pm$ 20%	18	0.020	13.8	6.5
RL-5040-H-18	18.0 $\pm$ 20%	14	0.022	13.2	6.0
RL-5040-H-22	22.0 $\pm$ 20%	13	0.024	11.8	5.7
RL-5040-H-33	33.0 $\pm$ 20%	10	0.037	9.6	4.5
RL-5040-H-47	47.0 $\pm$ 20%	8	0.052	7.8	3.7
RL-5040-H-68	68.0 $\pm$ 20%	7	0.067	6.7	3.4
RL-5040-H-100	100.0 $\pm$ 20%	6	0.115	5.6	2.8
RL-5040-H-330	330.0 $\pm$ 20%	3	0.325	3.0	1.5
RL-5040-H-680	680.0 $\pm$ 20%	1.6	0.780	2.0	1.1
RL-5040-H-1400	1400.0 $\pm$ 20%	1	1.300	1.5	0.7

NOTES:

1. Isat - DC CURRENT THAT WILL CAUSE INDUCTANCE TO DROP BY 10%
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. RESISTANCE TO SOLDER HEAT: 260°C FOR 10 SECONDS
5. INDUCTANCE TESTED AT 100 kHz, 0.1Vrms



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