

# RL-9580-4

## HIGH CURRENT SMD INDUCTOR

### DESCRIPTION

- High Current 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. 492

### FEATURES & APPLICATIONS

- Lowest height in this package footprint
- Shielded construction
- Lowest DCR/ $\mu$ H in this package size
- Handles high transient current spikes without saturation
- Ultra low EMI due to composite construction
- Frequency up to 5 MHz
- Typical applications include: notebook computers, desktop computers, server applications, high current POL converters, and low-profile, high-current power supplies

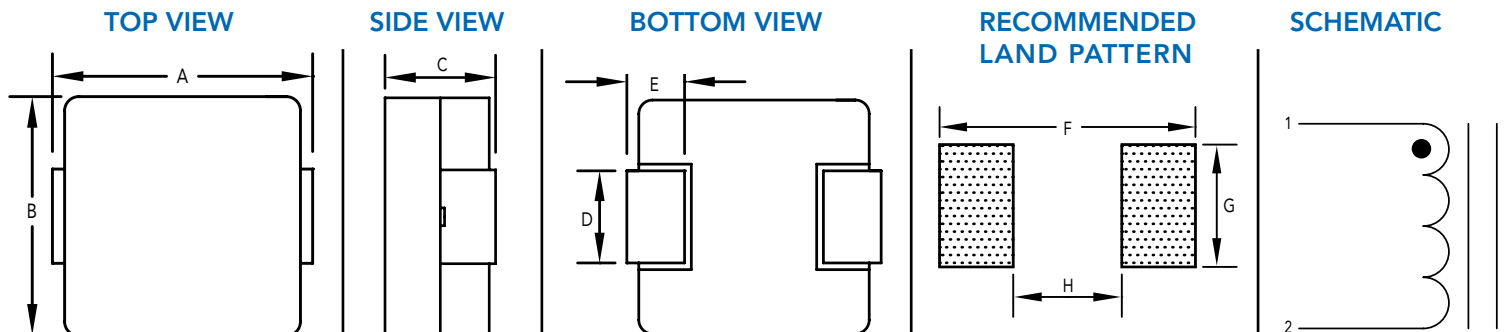
Verify operation with sample in actual circuit. Order samples at [www.rencousa.com](http://www.rencousa.com).

### MECHANICAL DIMENSIONS

U.S. Standard (mm)

PART NUMBER	A (MAX.)	B (MAX.)	C (MAX.)	D $\pm 0.012$ (0.3)	E $\pm 0.012$ (0.3)	F (REF.)
RL-9580-4-3.0	0.453 (11.50)	0.406 (10.30)	0.118 (3.00)	0.118 (3.00)	0.091 (2.30)	0.535 (13.60)
RL-9580-4-4.0	0.453 (11.50)	0.406 (10.30)	0.158 (4.00)	0.118 (3.00)	0.091 (2.30)	0.535 (13.60)
RL-9580-4-5.0	0.453 (11.50)	0.406 (10.30)	0.197 (5.00)	0.118 (3.00)	0.079 (2.00)	0.535 (13.60)

PART NUMBER	PART WEIGHT	G (REF.)	H (REF.)
RL-9580-4-3.0	1.700g (0.060oz)	0.138 (3.50)	0.213 (5.40)
RL-9580-4-4.0	2.442g (0.086oz)	0.138 (3.50)	0.213 (5.40)
RL-9580-4-5.0	3.034g (0.107oz)	0.138 (3.50)	0.213 (5.40)



# RL-9580-4

Renco Part No. RL-9580-4-3.0	Inductance ( $\mu$ H)	Isat (A)	Irms (A)	DCR (mOhms) TYP. @ 25°C	DCR (mOhms) MAX. @ 25°C
RL-9580-4-3.0-R36M	0.36 $\pm$ 20%	40.0	23.0	1.3	1.6
RL-9580-4-3.0-R47M	0.47 $\pm$ 20%	33.0	20.0	2.1	2.5
RL-9580-4-3.0-R56M	0.56 $\pm$ 20%	24.0	16.0	2.6	3.0
RL-9580-4-3.0-1R0M	1.00 $\pm$ 20%	20.0	15.0	4.6	6.0
RL-9580-4-3.0-1R5M	1.50 $\pm$ 20%	20.0	13.0	6.5	7.5
RL-9580-4-3.0-2R2M	2.20 $\pm$ 20%	16.0	12.0	8.0	9.0
RL-9580-4-3.0-3R3M	3.30 $\pm$ 20%	14.0	9.0	14.5	16.0
RL-9580-4-3.0-4R7M	4.70 $\pm$ 20%	13.0	7.0	20.5	22.5
RL-9580-4-3.0-5R6M	5.60 $\pm$ 20%	12.0	7.0	28.0	32.5
RL-9580-4-3.0-6R8M	6.80 $\pm$ 20%	9.5	6.5	30.2	35.0
RL-9580-4-3.0-8R2M	8.20 $\pm$ 20%	8.5	6.0	42.0	48.0
RL-9580-4-3.0-100M	10.00 $\pm$ 20%	8.0	5.0	50.0	55.0

## NOTES:

1. Isat - DC CURRENT THAT WILL CAUSE INDUCTANCE TO DROP BY 20%
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, 1.0Vrms



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RL-9580-4-4.0-R22M	0.22 $\pm$ 20%	60.0	35.0	0.80	1.0
RL-9580-4-4.0-R36M	0.36 $\pm$ 20%	60.0	31.0	1.05	1.2
RL-9580-4-4.0-R39M	0.39 $\pm$ 20%	60.0	30.0	1.10	1.3
RL-9580-4-4.0-R45M	0.45 $\pm$ 20%	45.0	29.0	1.30	1.5
RL-9580-4-4.0-R56M	0.56 $\pm$ 20%	40.0	25.0	1.60	1.8
RL-9580-4-4.0-R68M	0.68 $\pm$ 20%	39.0	22.0	2.40	2.7
RL-9580-4-4.0-1R0M	1.00 $\pm$ 20%	36.0	18.0	3.00	3.3
RL-9580-4-4.0-1R5M	1.50 $\pm$ 20%	33.0	16.0	4.00	4.6
RL-9580-4-4.0-2R2M	2.20 $\pm$ 20%	27.0	12.0	6.50	7.0
RL-9580-4-4.0-3R3M	3.30 $\pm$ 20%	20.0	11.0	10.80	11.8
RL-9580-4-4.0-4R7M	4.70 $\pm$ 20%	17.0	10.0	15.00	15.5
RL-9580-4-4.0-5R6M	5.60 $\pm$ 20%	14.0	9.0	17.00	19.3
RL-9580-4-4.0-6R8M	6.80 $\pm$ 20%	13.5	8.5	17.50	23.3
RL-9580-4-4.0-100M	10.00 $\pm$ 20%	12.0	7.5	27.00	30.0
RL-9580-4-4.0-150M	15.00 $\pm$ 20%	10.0	6.25	40.00	45.0
RL-9580-4-4.0-330M	33.00 $\pm$ 20%	5.0	3.5	92.00	112.0

Renco Part No. RL-9580-4-5.0	Inductance ( $\mu$ H)	Isat (A)	Irms (A)	DCR (mOhms) TYP. @ 25°C	DCR (mOhms) MAX. @ 25°C
RL-9580-4-5.0-R30M	0.30 $\pm$ 20%	65.0	38.0	0.57	0.61
RL-9580-4-5.0-1R0M	1.00 $\pm$ 20%	30.0	22.0	2.80	3.50
RL-9580-4-5.0-2R2M	2.20 $\pm$ 20%	24.0	16.0	5.40	6.00
RL-9580-4-5.0-100M	10.00 $\pm$ 20%	13.5	8.0	25.0	29.0

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