

RL-1294

AXIAL LEADED HIGH FREQUENCY INDUCTOR

DESCRIPTION

- Axial Leaded Inductor

ENVIRONMENTAL DATA

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

PACKAGING INFORMATION

- Packaging information: pgs. 489, 493

FEATURES & APPLICATIONS

- Engineered for low loss in high frequency switching applications
- 45 standard values ranging from 3.9μH to 18,000μH
- Rated currents to 1.28 A and saturations up to 3.60 ADC
- Typical applications include: step-down switching regulators, step-up switching regulators, continuous voltage supplies, high voltage line filtering, and surge suppression

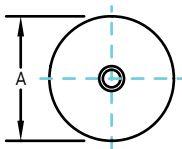
Verify operation with sample in actual circuit. Order samples at www.rencousa.com.

MECHANICAL DIMENSIONS

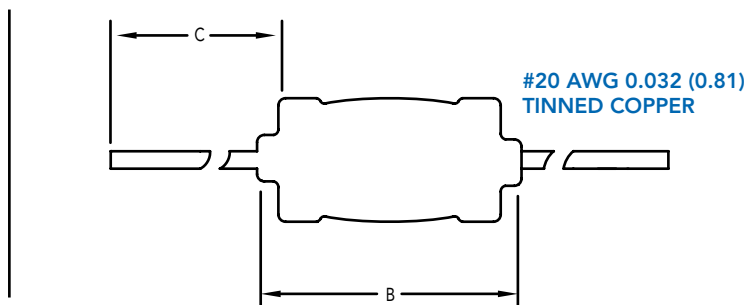
U.S. Standard (mm)

| PART NUMBER | A (MAX.) | B (MAX.) | C (MIN.) | PART WEIGHT |
|-------------|-------------|--------------|--------------|----------------|
| RL-1294 | 0.25 (6.35) | 0.70 (17.78) | 1.00 (25.40) | 1.5g (0.053oz) |

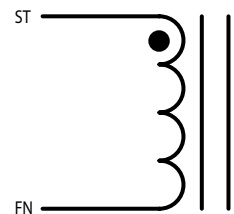
FRONT VIEW



SIDE VIEW



SCHEMATIC



RENCO ELECTRONICS INC.

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RL-1294

| Renco Part No. RL-1294 | Inductance (μ H) | DCR Max. (Ohms) | Isat (A) | Irms (A) |
|---------------------------|--------------------------|--------------------|-------------|-------------|
| RL-1294-3.9 | 3.90 | 0.029 | 3.60 | 1.280 |
| RL-1294-4.7 | 4.70 | 0.027 | 3.30 | 1.280 |
| RL-1294-5.6 | 5.60 | 0.024 | 3.00 | 1.280 |
| RL-1294-6.8 | 6.80 | 0.026 | 2.70 | 1.280 |
| RL-1294-8.2 | 8.20 | 0.028 | 2.50 | 1.280 |
| RL-1294-10 | 10.0 | 0.033 | 2.30 | 1.280 |
| RL-1294-12 | 12.0 | 0.037 | 2.10 | 1.280 |
| RL-1294-15 | 15.0 | 0.040 | 1.90 | 1.280 |
| RL-1294-18 | 18.0 | 0.044 | 1.70 | 1.280 |
| RL-1294-22 | 22.0 | 0.050 | 1.50 | 1.280 |
| RL-1294-27 | 27.0 | 0.058 | 1.40 | 1.280 |
| RL-1294-33 | 33.0 | 0.075 | 1.30 | 1.008 |
| RL-1294-39 | 39.0 | 0.094 | 1.20 | 0.804 |
| RL-1294-47 | 47.0 | 0.109 | 1.10 | 0.804 |
| RL-1294-56 | 56.0 | 0.140 | 0.97 | 0.804 |
| RL-1294-68 | 68.0 | 0.145 | 0.88 | 0.804 |
| RL-1294-82 | 82.0 | 0.152 | 0.80 | 0.804 |
| RL-1294-100 | 100.0 | 0.208 | 0.73 | 0.632 |
| RL-1294-120 | 120.0 | 0.283 | 0.66 | 0.508 |
| RL-1294-150 | 150.0 | 0.340 | 0.60 | 0.508 |
| RL-1294-180 | 180.0 | 0.362 | 0.54 | 0.508 |
| RL-1294-220 | 220.0 | 0.430 | 0.49 | 0.508 |
| RL-1294-270 | 270.0 | 0.557 | 0.45 | 0.400 |
| RL-1294-330 | 330.0 | 0.665 | 0.40 | 0.400 |
| RL-1294-390 | 390.0 | 0.772 | 0.37 | 0.400 |
| RL-1294-470 | 470.0 | 01.15 | 0.34 | 0.315 |

RL-1294 TABLE CONTINUES ON FOLLOWING PAGE

NOTES:

1. INDUCTANCE \pm 15% TESTED AT 1.0 kHz, 0.1 Vrms
2. Isat - DC CURRENT THAT WILL CAUSE INDUCTANCE TO DROP BY 5%
3. Irms - CURRENT THAT CAUSES THE TEMPERATURE TO RISE APPROX. 40°C ABOVE AMBIENT OF 25°C
4. ELECTRICAL SPECIFICATIONS MEASURED AT 25°C
5. SUGGESTED MAXIMUM VOLTAGE 100V
6. PART FINISHED WITH 135°C POLYOLEFIN SLEEVING THAT MEETS UL-224 VW-1
7. DISTINCTIVE BLUE SLEEVING
8. AVAILABLE TAPE AND REEL FOR AUTO-INSERTION



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| Renco Part No. RL-1294 | Inductance (μ H) | DCR Max. (Ohms) | Isat (A) | Irms (A) |
|---------------------------|--------------------------|--------------------|-------------|-------------|
| RL-1294-560 | 560.0 | 1.27 | 0.31 | 0.315 |
| RL-1294-680 | 680.0 | 1.61 | 0.28 | 0.250 |
| RL-1294-820 | 820.0 | 1.96 | 0.26 | 0.200 |
| RL-1294-1000 | 1000.0 | 2.30 | 0.23 | 0.200 |
| RL-1294-1200 | 1200.0 | 2.65 | 0.21 | 0.200 |
| RL-1294-1500 | 1500.0 | 3.45 | 0.19 | 0.158 |
| RL-1294-1800 | 1800.0 | 4.03 | 0.18 | 0.158 |
| RL-1294-2200 | 2200.0 | 4.48 | 0.16 | 0.158 |
| RL-1294-2700 | 2700.0 | 5.90 | 0.14 | 0.125 |
| RL-1294-3300 | 3300.0 | 6.56 | 0.13 | 0.125 |
| RL-1294-3900 | 3900.0 | 8.63 | 0.12 | 0.100 |
| RL-1294-4700 | 4700.0 | 10.5 | 0.11 | 0.100 |
| RL-1294-5600 | 5600.0 | 13.9 | 0.10 | 0.082 |
| RL-1294-6800 | 6800.0 | 16.3 | 0.09 | 0.082 |
| RL-1294-8200 | 8200.0 | 20.8 | 0.08 | 0.065 |
| RL-1294-10000 | 10000.0 | 26.4 | 0.08 | 0.050 |
| RL-1294-12000 | 12000.0 | 29.9 | 0.07 | 0.050 |
| RL-1294-15000 | 15000.0 | 42.5 | 0.06 | 0.039 |
| RL-1294-18000 | 18000.0 | 48.3 | 0.06 | 0.039 |

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