

RL-9625-2

SHIELDED SMD POWER INDUCTOR

DESCRIPTION

- Shielded 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. 507

FEATURES & APPLICATIONS

- Magnetically shielded surface mount inductor with high current rating
- Low resistance to keep power loss at a minimum
- Excellent for power line DC-DC conversion applications used in notebook computers and other electronic equipment
- Can use in series or in parallel

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

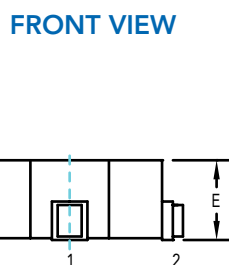
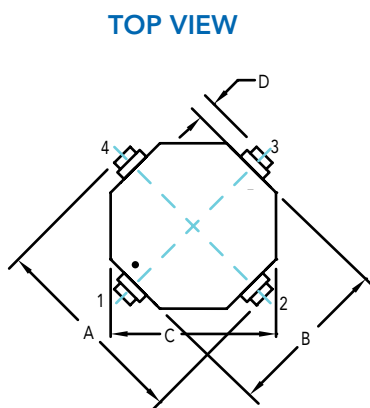
MECHANICAL DIMENSIONS

U.S. Standard (mm)

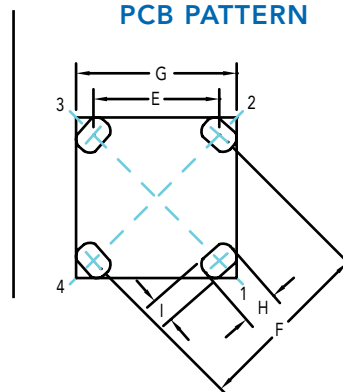
| PART NUMBER | A (TYP.) | B (TYP.) | C (TYP.) | D (TYP.) | E (MAX.) | F (TYP.) |
|-------------|---------------|---------------|---------------|--------------|--------------|---------------|
| RL-9625-2 | 0.550 (13.97) | 0.450 (11.43) | 0.450 (11.43) | 0.030 (0.76) | 0.231 (6.35) | 0.492 (12.50) |

| PART NUMBER | PART WEIGHT |
|-------------|---------------|
| RL-9625-2 | 2.0g (0.07oz) |

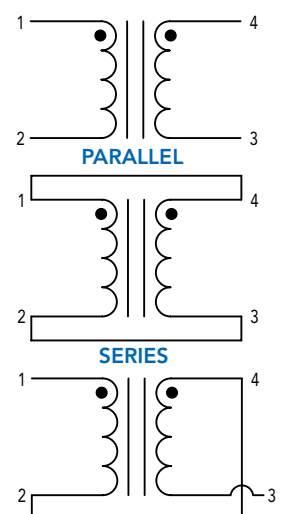
| G (TYP.) | H (TYP.) | I (TYP.) |
|---------------|--------------|--------------|
| 0.492 (12.50) | 0.160 (4.06) | 0.120 (3.05) |



RECOMMENDED PCB PATTERN



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-9625-2

| Renco Part No. RL-9625-2 | Inductance (μ H) | Inductance @ I _{rms} Min. (μ H) | DCR Max. (Ohms) | I _{rms} (A) | Inductance (μ H) | Inductance @ I _{rms} Min. (μ H) | DCR Max. (Ohms) | I _{rms} (A) |
|-----------------------------|--------------------------|--|--------------------|-------------------------|--------------------------|--|--------------------|-------------------------|
| | PARALLEL | | | | SERIES | | | |
| RL-9625-2-R49M | 0.49 \pm 20% | 0.37 | 0.0093 | 7.90 | 1.95 \pm 20% | 1.49 | 0.019 | 3.95 |
| RL-9625-2-R76M | 0.76 \pm 20% | 0.56 | 0.0112 | 7.20 | 3.05 \pm 20% | 2.24 | 0.023 | 3.60 |
| RL-9625-2-1R1M | 1.10 \pm 20% | 0.81 | 0.0166 | 5.90 | 4.39 \pm 20% | 3.24 | 0.033 | 2.95 |
| RL-9625-2-1R9M | 1.90 \pm 20% | 1.42 | 0.0274 | 4.60 | 7.81 \pm 20% | 5.69 | 0.055 | 2.30 |
| RL-9625-2-5R1M | 5.10 \pm 20% | 3.56 | 0.0534 | 3.30 | 20.62 \pm 20% | 14.23 | 0.107 | 1.65 |
| RL-9625-2-7R8M | 7.80 \pm 20% | 5.15 | 0.0653 | 3.00 | 31.23 \pm 20% | 20.61 | 0.131 | 1.50 |
| RL-9625-2-9R8M | 9.80 \pm 20% | 6.70 | 0.0933 | 2.50 | 39.53 \pm 20% | 26.79 | 0.187 | 1.25 |
| RL-9625-2-140M | 14.00 \pm 20% | 9.52 | 0.1139 | 2.30 | 59.05 \pm 20% | 38.09 | 0.228 | 1.15 |
| RL-9625-2-200M | 20.00 \pm 20% | 13.44 | 0.1684 | 1.90 | 82.47 \pm 20% | 53.76 | 0.337 | 0.95 |
| RL-9625-2-250M | 25.00 \pm 20% | 17.17 | 0.2306 | 1.60 | 102.60 \pm 20% | 68.68 | 0.461 | 0.80 |
| RL-9625-2-330M | 33.00 \pm 20% | 22.93 | 0.3312 | 1.30 | 132.86 \pm 20% | 91.72 | 0.662 | 0.65 |
| RL-9625-2-480M | 48.00 \pm 20% | 32.21 | 0.4025 | 1.20 | 195.20 \pm 20% | 128.16 | 0.805 | 0.60 |
| RL-9625-2-670M | 67.00 \pm 20% | 43.04 | 0.4760 | 1.10 | 269.50 \pm 20% | 172.16 | 0.952 | 0.55 |
| RL-9625-2-990M | 99.00 \pm 20% | 69.54 | 1.1300 | 0.72 | 396.38 \pm 20% | 278.15 | 2.259 | 0.36 |

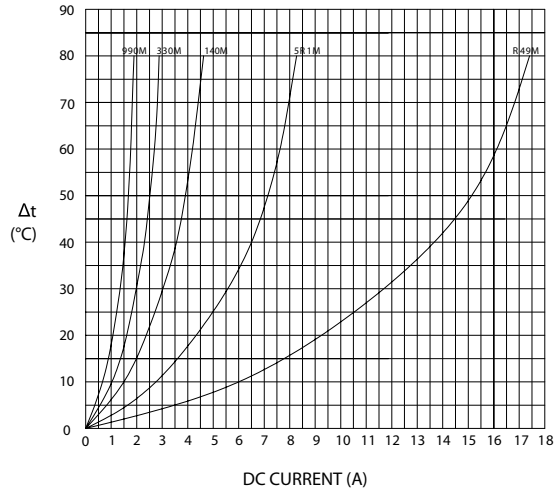
NOTES:

1. ELECTRICAL SPECIFICATIONS MEASURED AT 25°C
2. TURNS RATIO 1:1
3. I_{rms} - CURRENT THAT CAUSES THE TEMPERATURE TO RISE APPROX. 40°C ABOVE AMBIENT OF 25°C
4. INDUCTANCE TESTED AT 100 kHz, 0.25V_{rms}
5. HIPOT TESTED AT 300 VDC, 1mA MAX FOR 1 SECOND

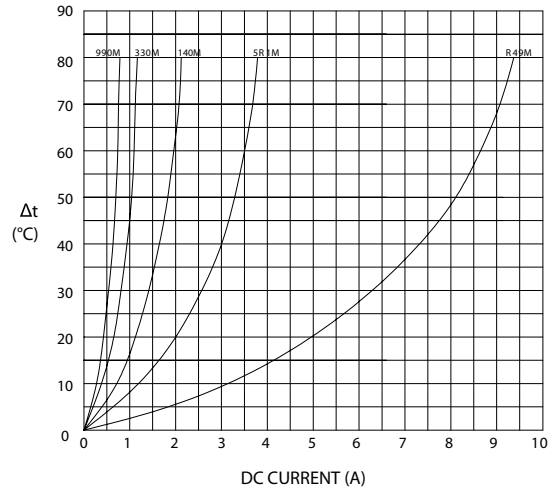


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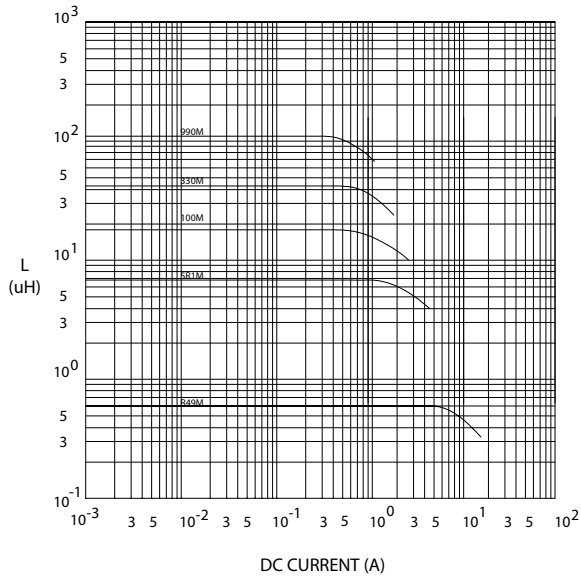
@ TEMP. RISE VS. DC SUPERPOSITION RESPONSE CURVE (PARA)



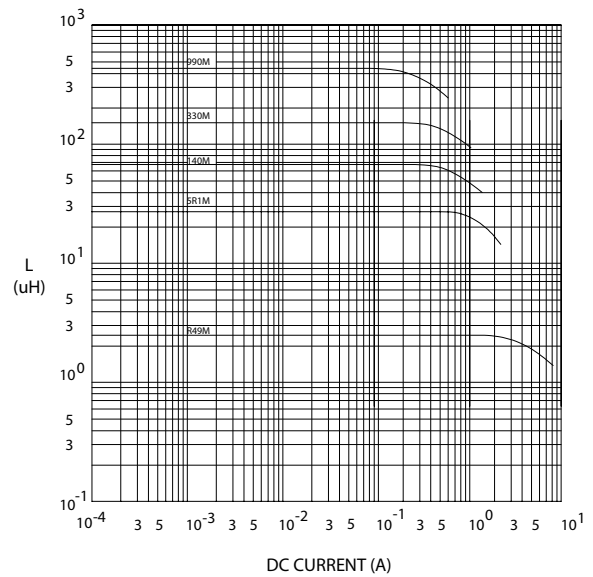
@ TEMP. RISE VS. DC SUPERPOSITION RESPONSE CURVE (SER)



@ INDUCTANCE VS. DC SUPERPOSITION RESPONSE CURVE (PARA)



@ INDUCTANCE VS. DC SUPERPOSITION RESPONSE CURVE (SER)



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