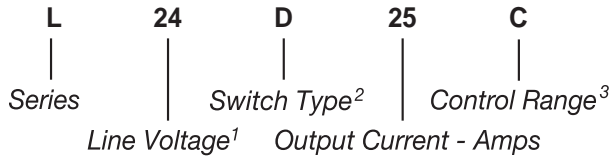


| Part Number | Description |
|-------------|--------------|
| L24D25C | 25A, 280 Vac |
| L24D25G | 25A, 280 Vac |

Part Number Explanation



NOTES

- 1) Line Voltage (nominal): 24 = 240 Vac
- 2) Switch Type: D = Zero-cross turn-on
- 3) Control Range: C = 3.5–15 Vdc, G = 12.5–32 Vdc

MECHANICAL SPECIFICATION

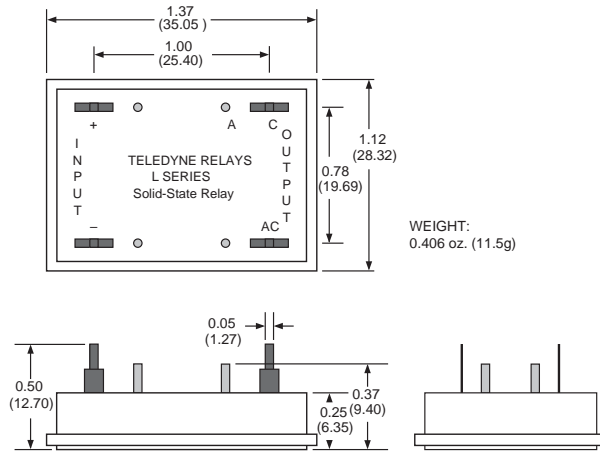


Figure 1 — Series L; dimensions in inches (mm)

INPUT (CONTROL) SPECIFICATION

| | Min | Max | Units |
|-----------------------------------|------|------|-------|
| Control Range | | | |
| L24D25C | 3.5 | 15 | Vdc |
| L24D25G | 12.5 | 32 | Vdc |
| Input Current Range | | | |
| L24D25C | 5 | 30 | mAdc |
| L24D25G | 5 | 14 | mAdc |
| Must Turn-Off Voltage | | 1 | Vdc |
| Input Resistance (Typical) | | | |
| L24D25C | | 470 | Ohms |
| L24D25G | | 2200 | Ohms |
| Reverse Voltage | | | |
| L24D25C | | 15 | V |
| L24D25G | | 32 | V |



FEATURES/BENEFITS

- Ultraminiature package
- Designed for PC Board Mounting
- Optional thermal pad available (see Optional Add-Ons)
- Zero-cross turn-on

DESCRIPTION

The Series L is designed to control medium-power AC loads, while occupying minimal board space. The Series L is an excellent choice for a PCB-mount power switching relay. A thermal pad is available to eliminate thermal grease when mounting it on to a heat sink. The relay provides optical isolation to protect control elements from load transients. The Series L also offers excellent thermal performance.

APPLICATIONS

- On/Off control of medium-power equipment
- Interfacing microprocessor controls to AC loads
- Heating control
- Medical equipment
- Test equipment

CONTROL CHARACTERISTICS

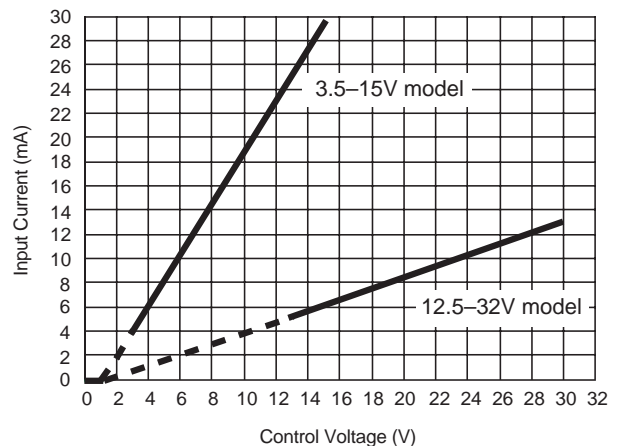


Figure 2 — Series L

OUTPUT (LOAD) SPECIFICATION

| | Min | Max | Unit |
|--|------------------|-----|------------------|
| Operating Range | 24 | 280 | Vrms |
| Peak Voltage | | 600 | Vpeak |
| Load Current Range | .05 | 25 | Arms |
| Maximum Surge Current Rating (Non-Repetitive) | | 250 | A |
| On-State Voltage Drop | 1.08 + (0.016xI) | | V |
| Synchronizing Level | | ±25 | V |
| Off-State Leakage Current | | 1 | mA |
| Turn-On Time | | 8.3 | ms |
| Turn-Off Time | | 8.3 | ms |
| Off-State dv/dt | | 500 | A/μs |
| Operating Frequency | 47 | 440 | Hz |
| I ² t for Match Fusing (<8.3ms) | | 260 | A ² S |

ENVIRONMENTAL SPECIFICATION

| | Min | Max | Unit |
|------------------------|------|-----|------|
| Operating Temperature | -55 | 100 | °C |
| Storage Temperature | -55 | 100 | °C |
| Input-Output Isolation | 4000 | | Vrms |
| Output-Case Isolation | 4000 | | Vrms |
| Rated Impulse Voltage | 4000 | | Vrms |

BLOCK DIAGRAM

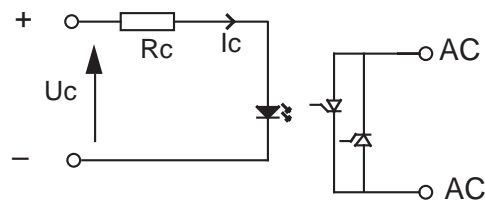


Figure 3 — Series L

NOTES:

1. Electrical specifications at 25°C unless otherwise specified.
2. An external MOV is recommended for transient voltage protection.
3. For 800Hz applications, contact factory.
4. For additional/custom options, contact factory.

OPTIONAL ADD-ONS

Please order add-ons separately:

- -12 — Thermal pad installed.

THERMAL CHARACTERISTICS

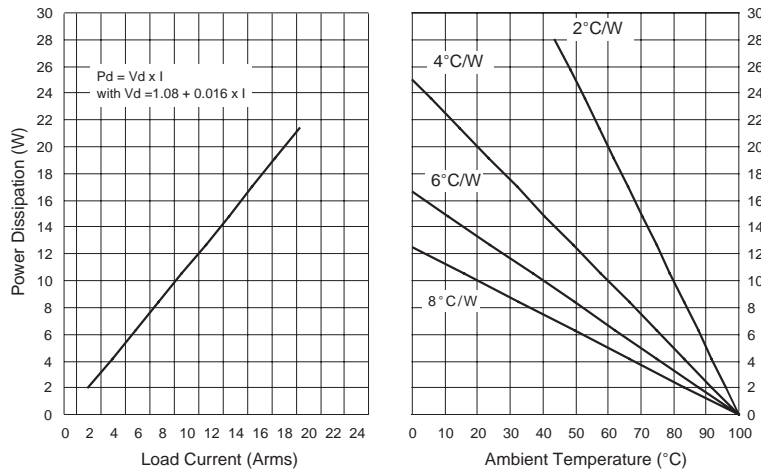


Figure 4 — Current derating curves