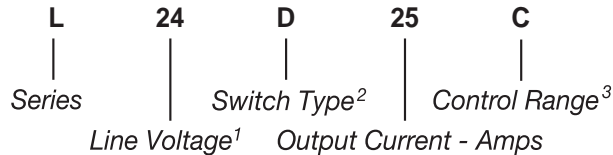


Part Number	Description
L24D25C	25A, 280 Vac
L24D40G	40A, 280 Vac

Part Number Explanation

NOTES

- 1) Line Voltage (nominal): 24 = 240 Vac; 48 = 480 Vac
- 2) Switch Type: D = Zero-cross turn-on;
- 3) Control Range: C = 3.5-15 Vdc, G = 12.5 - 32 Vdc
- 4) /R = RoHS Compliant

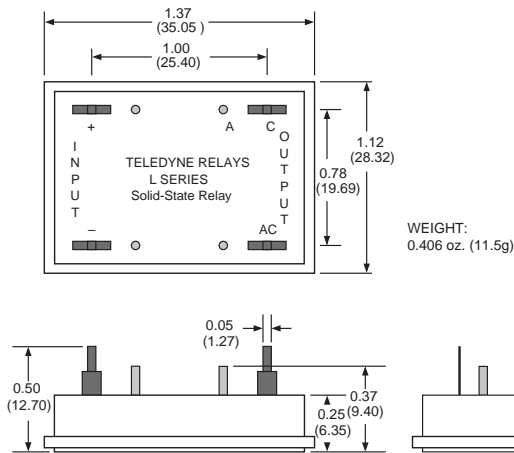
MECHANICAL SPECIFICATION


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

INPUT (CONTROL) SPECIFICATION

	Min	Max	Units
Control Range			
L24D25C	3.5	15	Vdc
L24DXXG	12.5	32	Vdc
Input Current Range			
L24D25C	5	30	mAdc
L24DXXG	5	14	mAdc
Must Turn-off Voltage		1	Vdc
Input Resistance (Typical)			
L24D25C		470	Ohms
L24DXXG		2200	Ohms
Reverse Voltage			
L24D25C		15	V
L24DXXG		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

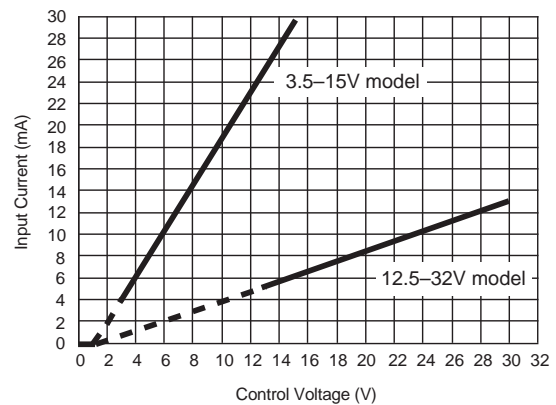
CONTROL CHARACTERISTICS


Figure 2 — Series L

OUTPUT (LOAD) SPECIFICATION

	Min	Max	Unit
Operating Range			
All Relays	24	280	V
Peak Voltage			
All Relays		600	V _{peak}
Load Current Range			
L24D25C	.05	25	Arms
L24D25G	.05	25	Arms
L24D40G	.05	40	Arms
Maximum Surge Current Rating (Non-Repetitive)			
L24D25		250	A
L24D40		350	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
I²t for Match Fusing (<8.3 ms)		260	A ² S

BLOCK DIAGRAM

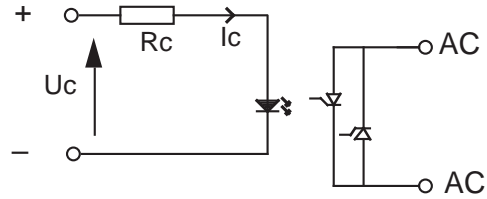


Figure 3 — Series L

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.

ENVIRONMENTAL SPECIFICATION

	Min	Max	Unit
Operating Temperature	-55	100	°C
Storage Temperature	-55	100	°C
Input-Output Isolation	4000		V _{rms}
Output-Case Isolation	3300		V _{rms}
Rated Impulse Voltage	3300		V _{rms}

THERMAL CHARACTERISTICS

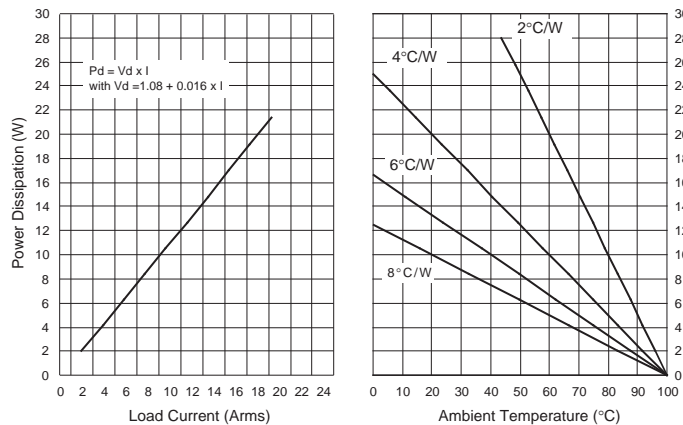


Figure 4 — Current derating curves

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[Teledyne Relays:](#)

[L24D25C](#) [L24D25G](#)