

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

Part Number Explanation

L	24	D	25	C
Series	Line Voltage ¹	Switch Type ²	Output Current - Amps	Control Range ³

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

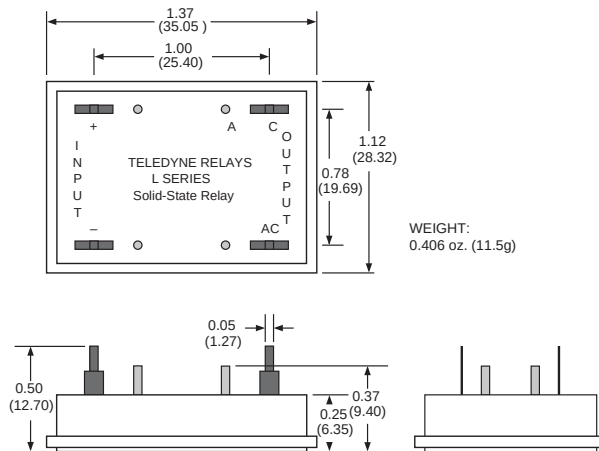


Figure 1 — Series L; dimensions in inches (mm)

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

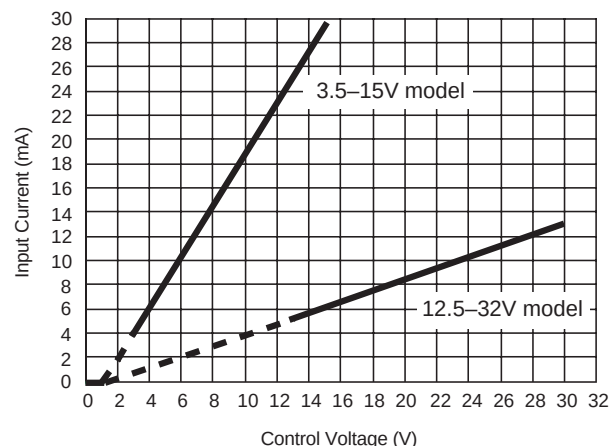


Figure 2 — Series L

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	$1.08 + (0.016 \times I)$		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/ μ s
Operating Frequency	47	440	Hz
I ² t for Match Fusing (<8.3ms)		260	A ² S

ENVIRONMENTAL SPECIFICATION

	Min	Max	Unit
Operating Temperature	-40	100	°C
Storage Temperature	-40	100	°C
Input-Output Isolation	4000		Vrms
Output-Case Isolation	4000		Vrms
Rated Impulse Voltage	4000		Vrms

BLOCK DIAGRAM

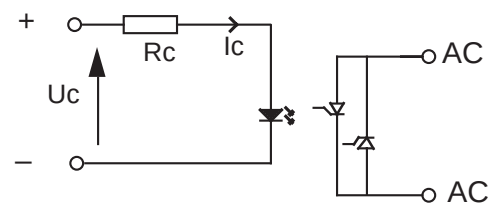


Figure 3 — Series L

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

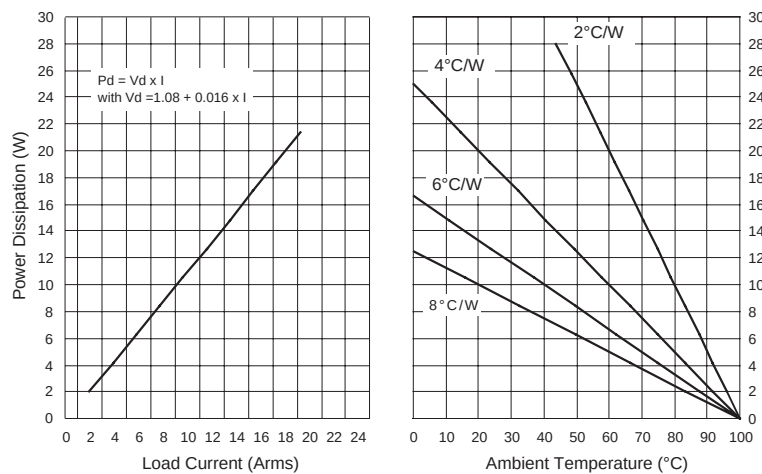


Figure 4 — Current derating curves