



Series L

15-42.5 Amp • SCR/DIODE Modules

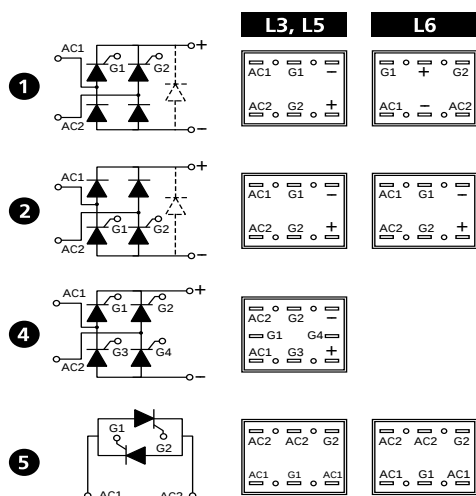
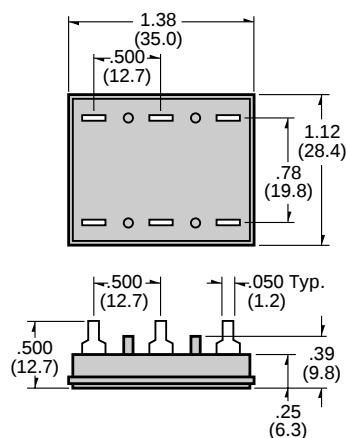
- **Low Profile**
- **Designed for Printed Circuit Board Connections**

Circuit Modules provide ratings up to 42.5 amps in a low profile package designed for printed circuit board connections. Available in three standard bridge circuits and an AC switch version, all models have 2500 Vrms isolation and are UL recognized (file no. E72445).

Manufactured in Crydom's ISO 9002 Certified facility for optimum product performance and reliability.

MECHANICAL DIMENSIONS

All dimensions are in inches (millimeters)



PART NUMBER IDENTIFICATION

Series Type	Current	Circuit Type	AC Line Voltage	Options
L-Case style	3 - 15 Amps	1 - 5	1 - 120 Vac	F - Free
(Ceramic	5 - 25 Amps	(see schematic	2 - 240 Vac	Wheeling
Base)	6 - 42.5 Amps*	diagrams)	3 - 280 Vac	Diode
			4 - 480 Vac	

Example: L512F

* 42.5 Amp Rating Not Available In Circuit 4

MODEL NO.		L3	L5	L6
ELECTRICAL SPECIFICATIONS		RATINGS		
I_D	Maximum DC Output Current ($T_c = 85^\circ\text{C}$)	15A	25A	42.5A
V_F	Maximum Voltage Drop @ Amps Peak	2.2V @ 15A	1.65V @ 25A	1.6V @ 42.5A
T_J	Operating Junction Temperature Range	-40°C to $+125^\circ\text{C}$		
di/dt	Critical Rate of Rise of On-State Current @ $T_J=125^\circ\text{C}$	100A/ μs		
dv/dt	Critical Rate of Rise of Off-State Voltage	500V/ μs	500V/ μs	500V/ μs
V_{RMS}	AC Line Input Voltage (Repetitive Peak Reverse Voltage)	120 (400 V_{RRM}) 240 (600 V_{RRM}) 280 (800 V_{RRM}) 480 (1200 V_{RRM})		
I_{TSM}	Maximum Non-Repetitive Surge Current ($1/2$ Cycle, 60Hz)	225A	300A	600A
I^2T	Maximum I^2T for Fusing ($t=8.3\text{ms}$) [A^2sec]	210	375	1500
I_{GT}	Maximum Required Gate Current to Trigger @ 25°C	60mA	60mA	80mA
V_{GT}	Maximum Required Gate Voltage to Trigger @ 25°C	2.5V	2.5V	3.0V
$P_{G(AV)}$	Average Gate Power	0.5W	0.5W	0.5W
V_{GM}	Maximum Peak Gate Voltage (Reverse)	5.0V	5.0V	5.0V
$R_{\theta JC}$	Maximum Thermal Resistance Junction to Ceramic Base per Chip	1.25 $^\circ\text{C}/\text{W}$	0.9 $^\circ\text{C}/\text{W}$	0.7 $^\circ\text{C}/\text{W}$
V_{ISOL}	Isolation Voltage	2500 V_{RMS}	2500 V_{RMS}	2500 V_{RMS}

MECHANICAL SPECIFICATIONS

Weight: (typical)

.5 oz. (14.4 g)

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APPROVALS

UL E72445

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