

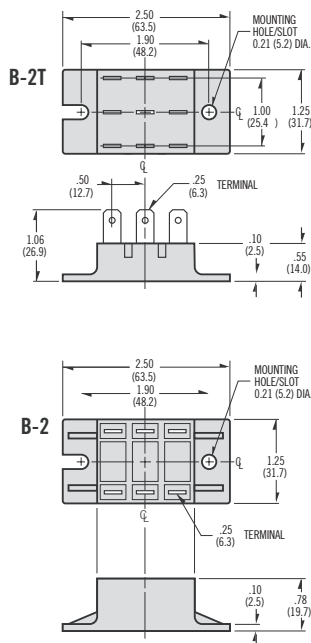


Modules come in eight standard circuits and are designed to control AC or DC variable voltage output up to 15KW. The package comes with standard .250 quick-connect terminals. All models have 2500 Vrms isolation and are UL recognized E72445. Optional isolation barriers are available.

- **Eight Standard Circuits**
- **AC or DC Variable Voltage Output to 15KW**

**Mechanical Dimensions**

All dimensions are in inches (millimeters)



**Electrical Specifications**

	B5	B6
$I_D$ Maximum DC Output Current @ $T_c = 85^\circ\text{C}$ (A)	25	42.5
$V_F$ Maximum Voltage Drop @ Amps Peak	1.65V @ 25A	1.6V @ 42.5A
$T_J$ Operating Junction Temperature Range	-40°C to +125°C	
di/dt Critical Rate of Rise of On-State Current @ $T_J=125^\circ\text{C}$ (A/ $\mu\text{s}$ )	100	
dv/dt Critical Rate of Rise of Off-State Voltage	500	
$V_{RMS}$ Repetitive Peak Reverse Voltage (AC Line Input Voltage)	400 (120Vac) 600 (240Vac) 800 (280Vac) 1200 (480Vac)	
$I_{TSM}$ Maximum Non-Repetitive Surge Current (A) [ $1/2$ Cycle, 60Hz ]	250	600
$I^2T$ Maximum $I^2T$ for Fusing ( $A^2\text{sec}$ ) [ $t=8.3\text{ms}$ ]	260	1500
$I_{GT}$ Maximum Required Gate Current to Trigger @ 25°C (mA)	60	80
$V_{GT}$ Maximum Required Gate Voltage to Trigger @ 25°C (V)	2.5	3.0
$P_{G(AV)}$ Average Gate Power	0.5W	
$V_{GM}$ Maximum Peak Gate Voltage (Reverse)	5.0V	
$R_{\theta JC}$ Maximum Thermal Resistance Junction to Ceramic Base per Chip	0.9°C/W	0.7°C/W
$V_{ISOL}$ Isolation Voltage	2500 $V_{RMS}$	

**Mechanical Specifications**

Weight (Typical)	1.5 oz. (42.5g)
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ISO9001 CERTIFIED

Competitive part number cross-reference available at: [www.cynergy3.com](http://www.cynergy3.com)

**Approvals**

UL - E72445

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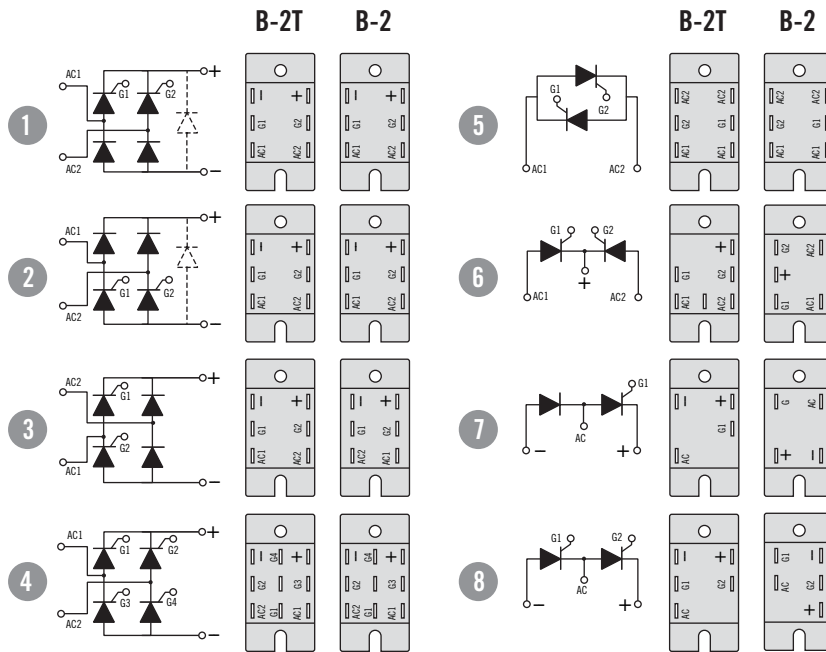
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**Part Number Identification**

Series	Current	Circuit Type	AC Line Voltage	Options*	Case Style
B	5 - 25 Amps	1 - 8	1 - 120 Vac	F - Free	-2T (Std)
	6 - 42.5 Amps	(see schematic diagrams)	2 - 240 Vac	Wheeling Diode	-2 with Isolation Barriers
			3 - 280 Vac	SE - External Suppressor	
			4 - 480 Vac		

Example: B512FSE-2T



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