

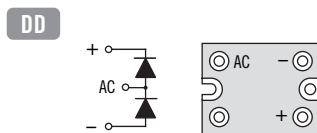
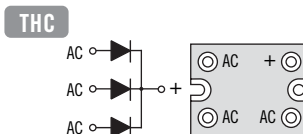
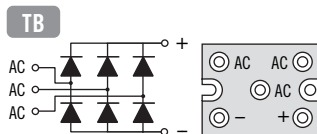
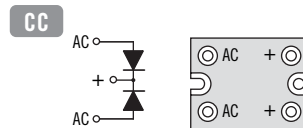
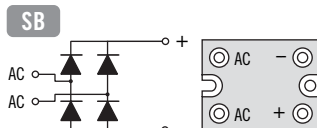
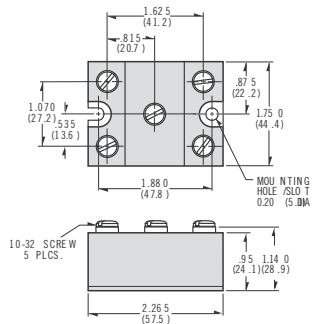


Single- and three-phase diode circuits incorporate highly efficient thermal management to provide high surge capability, extended life, and reliable performance. Available in five circuits, all models come in an industry standard package, provide 2500 Vrms from all terminals to the baseplate, and are UL recognized E72445.

- **High Surge Current Rectifier Circuits**
- **Up to 1600 Volt Blocking Standard**

**Mechanical Dimensions**

All dimensions are in inches (millimeters)



**Electrical Specifications**

	M5060	M50100
$I_D$ Maximum DC Output Current @ $T_c = 85^\circ\text{C}$ (A)	60	100
$V_F$ Maximum Voltage Drop @ Amps Peak	1.35V @60A	1.2V @ 100A
$T_J$ 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)	
	1000 (380Vac)	
	1200 (480Vac)	
	1400 (530Vac)	
1600 (600Vac)		
$I_{TSM}$ Maximum Non-Repetitive Surge Current (A) [ $1/2$ Cycle, 60Hz]	800	1500
$I^2T$ Maximum $I^2T$ for Fusing ( $A^2\text{-sec}$ ) [ $t=8.3\text{ms}$ ]	2650	9350
$R_{\theta JC}$ Maximum Thermal Resistance Junction to Ceramic Base per Chip	0.45°C/W	0.3°C/W
$V_{ISOL}$ Isolation Voltage	2500 $V_{RMS}$	

**Mechanical Specifications**

Weight (Typical)	4.5 oz. (158g)
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**Part Number Identification**

Series	Current	Circuit Type	Voltage	
M50	60 - 60 Amps	(see schematic diagrams)	400 (120 Vac)	1200 (480Vac)
	100 - 100 Amps		600 (240Vac)	1400 (530Vac)
			1000 (380Vac)	1600 (600Vac)

Example: M50100TB1200

ISO9001 CERTIFIED

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

**Approvals**

UL - E72445

**USA**  
 Sales & Tech Support (866) 258-5057  
 Email: [sales@cynergy3.com](mailto:sales@cynergy3.com)  
 Cynergy3 Components  
 2320 Paseo de las Americas, Suite 104  
 San Diego, CA 92154

**EUROPE - UK**  
 Telephone +44 (0) 1202 897969  
 Fax +44 (0) 1202 891918  
 Email: [sales@cynergy3.com](mailto:sales@cynergy3.com)  
 Cynergy3 Components Ltd.  
 7 Cobham Road  
 Ferndown Industrial Estate  
 Wimborne, Dorset BH21 7PE

**ASIA - Thailand**  
 Telephone +66 (0)2 665 2517  
 Fax +66 (0)2 665 2588  
 Cynergy 3 Components, Asia  
 18/8 Fico Place 12th Floor  
 Soi Sukhumvit 21 (Asoke)  
 Klongtoey Nua, Wattana  
 Bangkok, Thailand 10110