

series M50 Diode

60-100Amp • Diode Modules

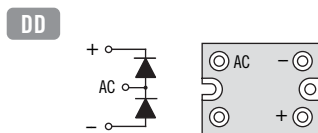
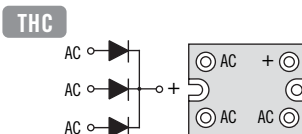
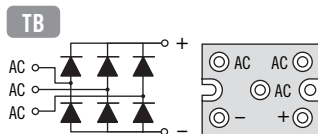
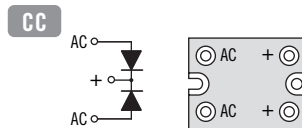
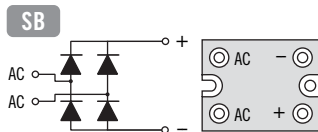
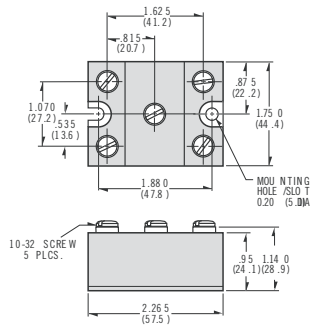


Single- and three-phase diode circuits incorporate highly efficient thermal management to provide high surge capability, extended life, and reliable performance. Available in five circuits, all models come in an industry standard package, provide 2500 Vrms from all terminals to the baseplate, and are 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/ μs)	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)	
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)
Example: SB			1000 (380Vac)	1600 (600Vac)

Example: M50100TB1200