



## M50 DIODE SERIES

POWER MODULES



### Features

- High Surge Current Rectifier Circuits
- 5 Different Circuits to Choose from
- Up to 1600 Volt Blocking Standard
- UL Recognized E72445



## SPECIFICATIONS

### Electrical

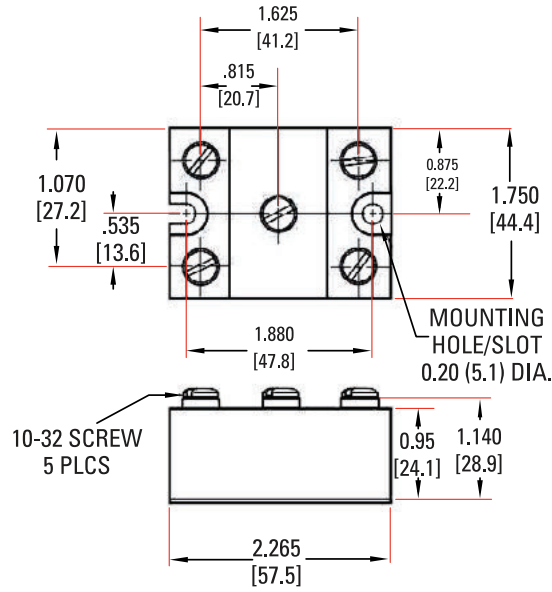
Part Number	Symbol	M5060	M50100
Maximum DC Output Current (Tc= 85°C)	$I_D$	60 A	100 A
Maximum Voltage Drop @ Amps Peak	$V_F$	1.35V @ 50A	1.2V @ 100 A
Operating Junction Temperature Range	$T_J$	-40 - 125°C	-40 - 125°C
Repetitive Peak Reverse Voltage (AC Line Nominal) [Vpk] VRRMS	$V_{RRMS}$	400 (120 VAC)	
		600 (240 VAC)	
		800 (280 VAC)	
		1200 (480 VAC)	
		1600 (600 VAC)	
Maximum Non-Repetitive Surge Current (1/2 Cycle, 60 Hz) [A]	$I_{TSM}$	800	1500
Maximum $I^2 t$ for Fusing (t=8.3ms)[A <sup>2</sup> sec]	$I^2 t$	2650	9350
Maximum Thermal Resistance, Junction to Ceramic Base per Chip [°C/W]	$R_{JC}$	0.45°C/W	0.3°C/W
Insulation Voltage [Vrms]	$V_{ISOL}$	2500	

### General

Weight (typical)	4.5 oz (158g)
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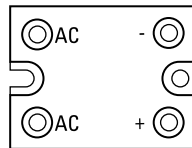
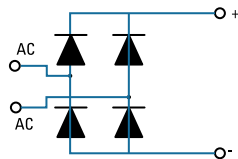


# EQUIVALENT CIRCUIT DIAGRAMS / MECHANICAL SPECIFICATIONS

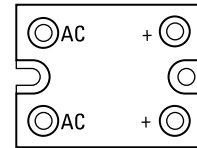
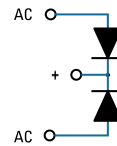


## CIRCUIT DIAGRAMS

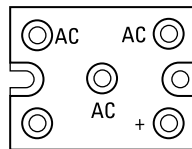
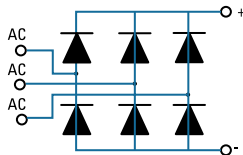
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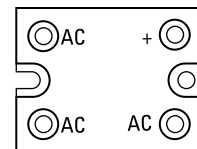
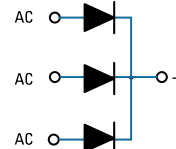
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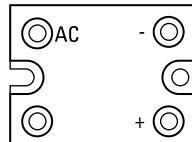
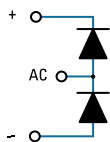
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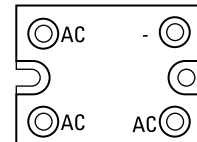
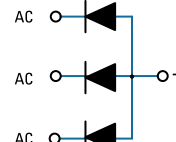
THC



DD



THA

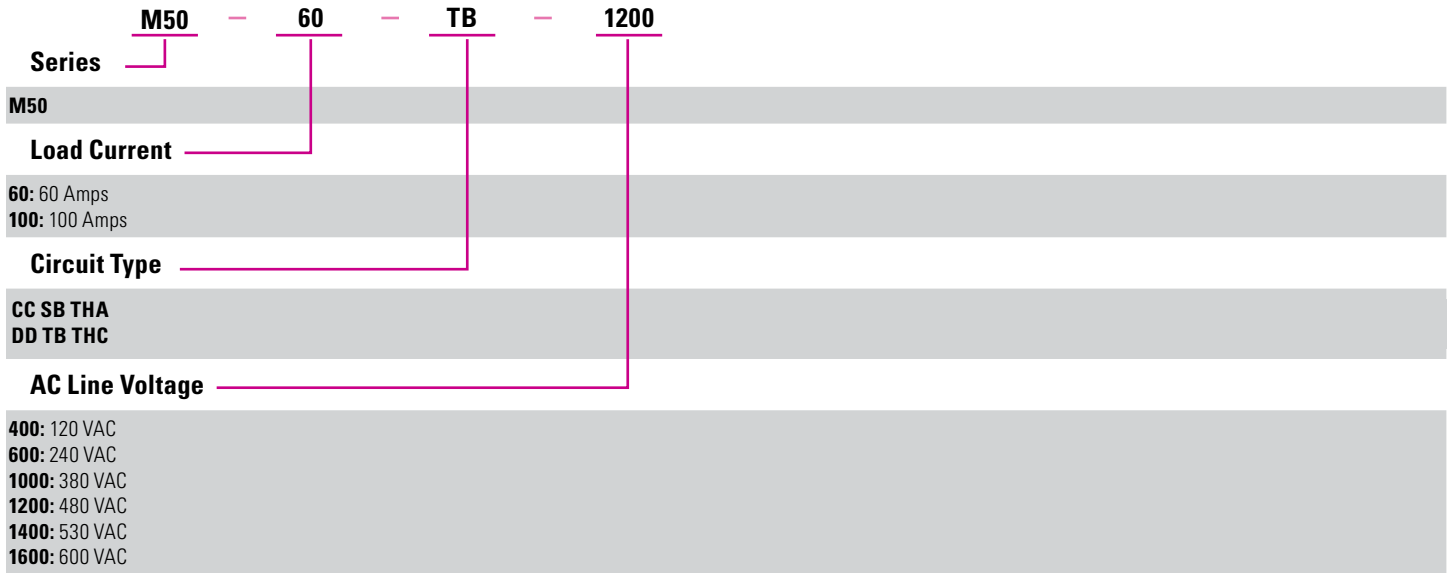




## AVAILABLE OPTIONS

Example : M5060TB1200

Not all Combinations available



## AGENCY APPROVALS & CERTIFICATIONS



## WARNINGS



### RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

**Failure to follow these instructions can result in serious injury, or equipment damage.**



### HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

**Failure to follow these instructions will result in death or serious injury.**

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