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

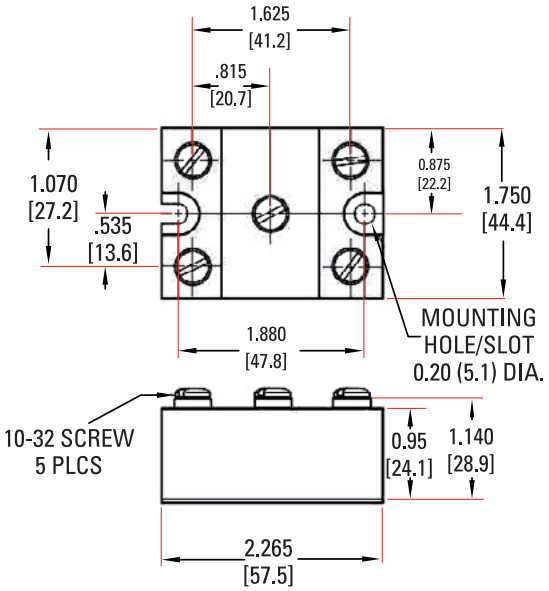
Part Number	Symbol	M5060	M50100
Maximum DC Output Current (Tc= 85°C)	I_D	60 A	100 A
Maximum Voltage Drop @ Amps Peak	V_F	1.35V @ 50A	1.2V @ 100 A
Operating Junction Temperature Range	T_J	-40 - 125°C	-40 - 125°C
Repetitive Peak Reverse Voltage (AC Line Nominal) [Vpk] VRRMS	V_{RMS}	400 (120 VAC)	
		600 (240 VAC)	
		1000 (380 VAC)	
		1200 (480 VAC)	
		1400 (530 VAC)	
		1600 (600 VAC)	
Maximum Non-Repetitive Surge Current (1/2 Cycle, 60 Hz) [A]	I_{TSM}	800	1500
Maximum I^2t for Fusing (t=8.3ms)[A^2 sec]	I^2t	2650	9350
Maximum Thermal Resistance, Junction to Ceramic Base per Chip [°C/W]	R_{JC}	0.45°C/W	0.3°C/W
Isolation Voltage [Vrms]	V_{ISOL}	2500	

General

Weight (typical)	4.5 oz (158g)

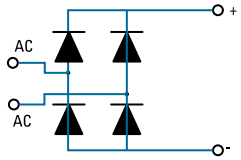
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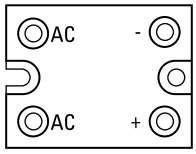
EQUIVALENT CIRCUIT DIAGRAMS / MECHANICAL SPECIFICATIONS



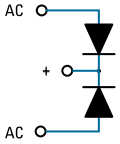
CIRCUIT DIAGRAMS

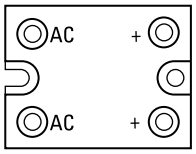
SB



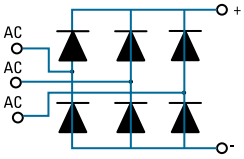


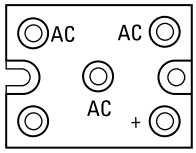
CC



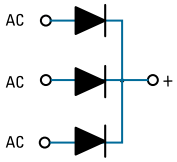


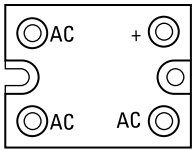
TB



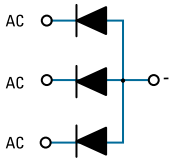


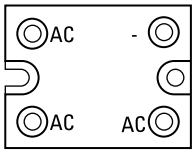
THC





THA





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ORDERING OPTIONS

Example : M5060TB1200

NOTE: Not all combinations are available.
Consult factory for information on the availability of a specific part number.

M50	60	TB	1200

Series

M50

Load Current

60: 60 Amps
100: 100 Amps

Circuit Type

CC SB THA
TB THC

AC Line Voltage

400: 120 VAC
600: 240 VAC
1000: 380 VAC
1200: 480 VAC
1400: 530 VAC
1600: 600 VAC

AGENCY APPROVALS & CERTIFICATIONS

c UL us E72445 RoHS

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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