

# 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

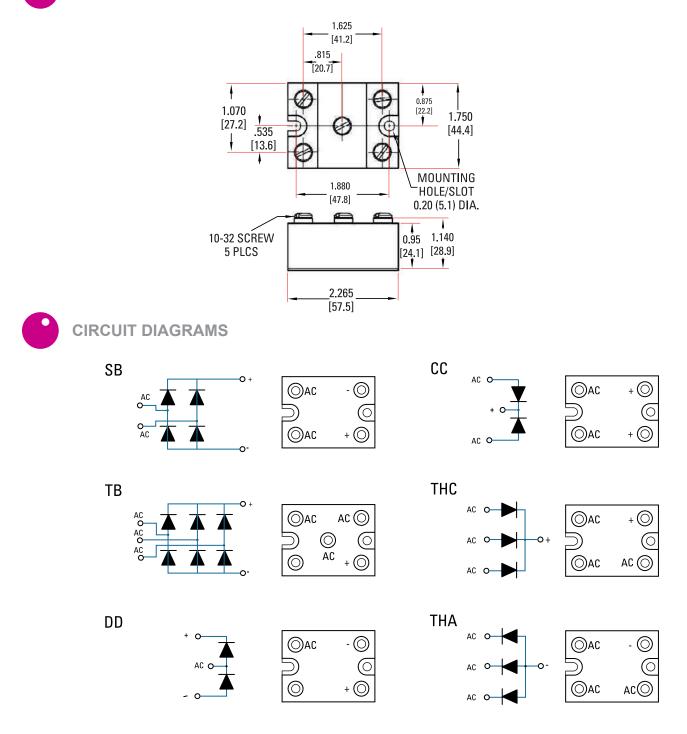
## Electrical

Part Number	Symbol	M5060	M50100		
Maximum DC Output Current (Tc= 85°C)	I <sub>D</sub>	60 A	100 A		
Maximum Voltage Drop @ Amps Peak	V <sub>F</sub>	1.35V @ 50A	1.2V @ 100 A		
<b>Operating Junction Temperature Range</b>	TJ	-40 - 125°C	-40 - 125°C		
		400 (120 VAC)			
	V <sub>RRMS</sub>	600 (240 VAC)			
Repetitive Peak Reverse Voltage (AC Line		800 (280 VAC)			
Nominal) [Vpk] VRRMS		1200 (480 VAC)			
		1400 (530 VAC)			
		1600 (6	00 VAC)		
Maximum Non-Repetitive Surge Current (1/2 Cycle, 60 Hz) [A]	Ι <sub>τSM</sub>	800	1500		
Maximum I <sup>2</sup> t for Fusing (t=8.3ms)[A <sup>2</sup> sec]	l2t	2650	9350		
Maximum Thermal Resistance, Junction to Ceramic Base per Chip [°C/W]	R <sub>JC</sub>	0.45°C/W	0.3°C/W		
Insolation Voltage [Vrms]	V <sub>ISOL</sub>	25	00		

# General

Weight (typical)	4.5 oz (158g)
	I

EQUIVALENT CIRCUIT DIAGRAMS / MECHANICAL SPECIFICATIONS





Not all Combinations available

	M50	—	60	—	TB	—	1200
Series							
M50							
Load Cu	rrent —						
<b>60:</b> 60 Amps <b>100:</b> 100 Amp							
Circuit	Гуре —						
CC SB THA DD TB THC							
AC Line	Voltage						

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

2

## **AGENCY APPROVALS & CERTIFICATIONS**





#### RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

The product's side panels may be hot, allow the product to cool before touching



## The product's side panels may be hot, allow the product to c 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.

Page 3

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