

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

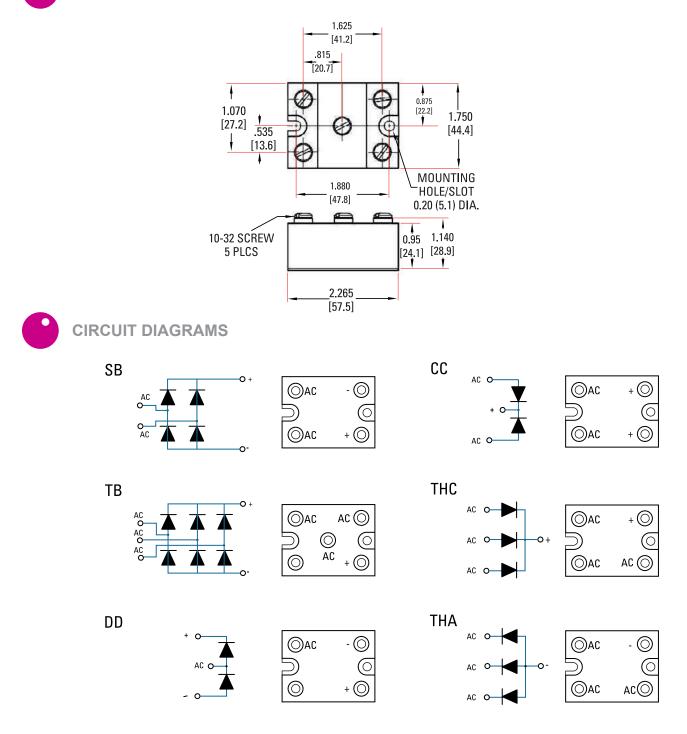
Electrical

| 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 | TJ | -40 - 125°C | -40 - 125°C | | |
| | | 400 (120 VAC) | | | |
| | V _{RRMS} | 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 _{τSM} | 800 | 1500 | | |
| Maximum I ² t for Fusing (t=8.3ms)[A ² sec] | l2t | 2650 | 9350 | | |
| Maximum Thermal Resistance, Junction to Ceramic Base per Chip [°C/W] | R _{JC} | 0.45°C/W | 0.3°C/W | | |
| Insolation Voltage [Vrms] | V _{ISOL} | 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 — | | | | | | |
| 60: 60 Amps 100: 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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