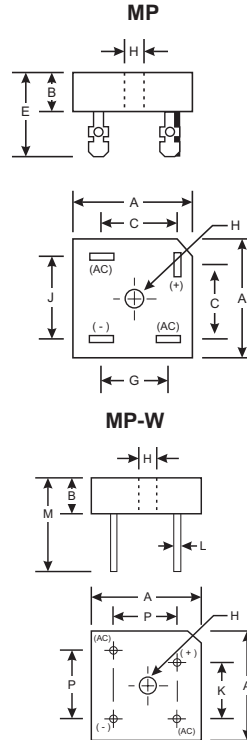


Features

- Diffused Junction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Surge Overload Rating to 300A Peak
- Case to Terminal Isolation Voltage 1500V
- UL Listed: Recognized Component Index, File Number E95060

Mechanical Data

- Case: Molded Plastic with Heatsink Internally Mounted in the Bridge Encapsulation
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Symbols Marked on Case
- Mounting: Through Hole for #10 Screw
- Mounting Torque: 8.0 Inch-pounds Maximum
- MP Weight: 23 grams (approx.)
- MP-W Weight: 17 grams (approx.)
- Mounting Position: Any



| MP / MP-W | | |
|----------------------|-------------------------------------|-------|
| Dim | Min | Max |
| A | 28.40 | 28.70 |
| B | 9.70 | 10.00 |
| C | 15.70 | 16.70 |
| E | 22.86 | 25.40 |
| G | 13.50 | 14.50 |
| H | Hole for #10 screw 5.08Ø Nominal | |
| J | 17.50 | 18.50 |
| K | 10.90 | 11.90 |
| L | 0.97Ø | 1.07Ø |
| M | 30.50 | — |
| P | 17.60 | 18.60 |
| All Dimensions in mm | | |

W Suffix Designates Wire Leads
No Suffix Designates Faston Terminals

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

Single phase, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| Characteristic | Symbol | MP25 005/W | MP25 01/W | MP25 02/W | MP25 04/W | MP25 06/W | MP25 08/W | MP25 10/W | Unit |
|---|--|-------------|-----------|-----------|-----------|-----------|-----------|-----------|------------------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | V _{RRM} V _{RWM} V _R | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| RMS Reverse Voltage | V _{R(RMS)} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current @ T _C = 55°C | I _O | 25 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current, 8.3 ms Single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 300 | | | | | | | A |
| Forward Voltage (per element) @ I _F = 12.5A | V _F | 1.1 | | | | | | | V |
| Peak Reverse Current @ T _C = 25°C at Rated DC Blocking Voltage @ T _C = 125°C | I _{RM} | 10 0.5 | | | | | | | µA mA |
| I ² t Rating for Fusing (Note 1) | I ² t | 373 | | | | | | | A ² s |
| Typical Junction Capacitance (Note 2) | C _J | 300 | | | | | | | pF |
| Typical Thermal Resistance Junction to Case (Note 3) | R _{θJC} | 3.8 | | | | | | | K/W |
| Operating and Storage Temperature Range | T _J , T _{STG} | -65 to +125 | | | | | | | °C |

- Notes:
1. Non-repetitive, for t > 1.0ms and t < 8.3ms.
 2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
 3. Thermal resistance junction to case per element mounted on heatsink.

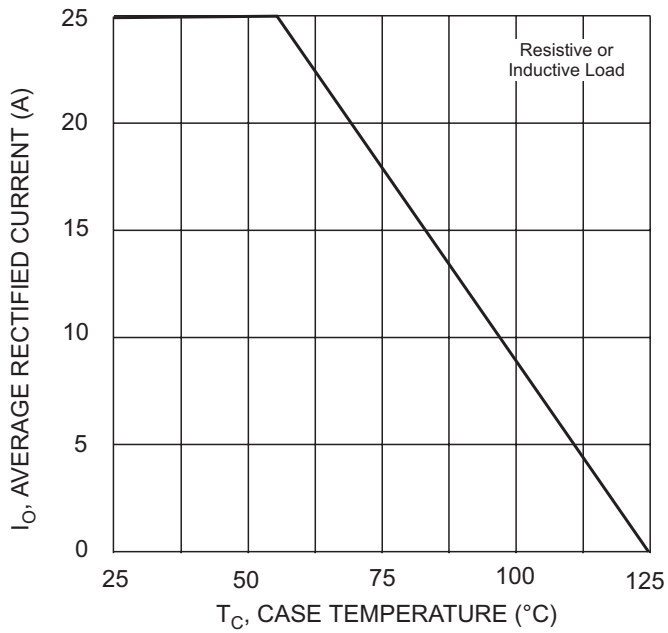


Fig. 1 Forward Current Derating Curve

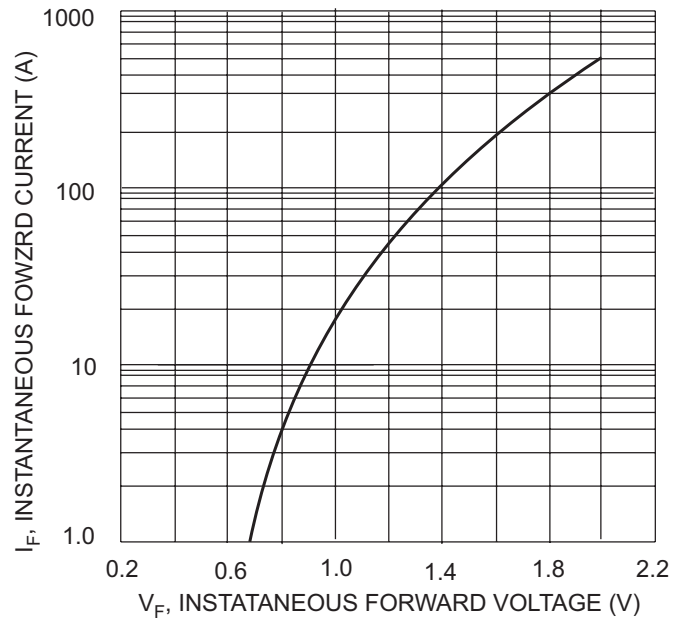


Fig. 2 Typical Forward Characteristics

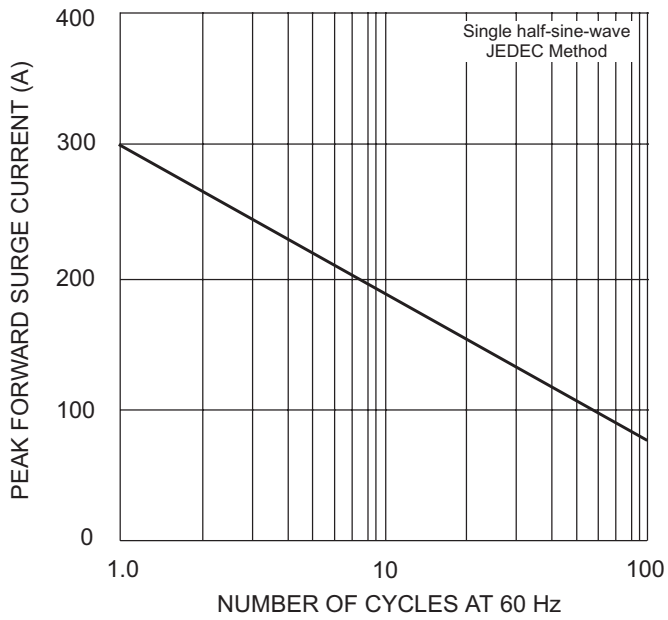


Fig. 3 Maximum Non-Repetitive Surge Current

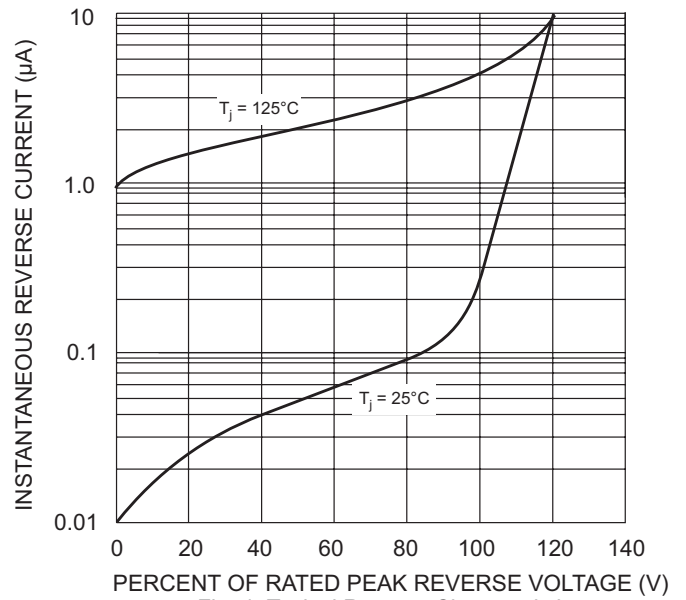


Fig. 4 Typical Reverse Characteristics