

Features

- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- High Conductivity Metal Case

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 2.2°C/W Junction to Case

Mechanical Data

- Mounting Torque: 20 in-lbs Maximum
- Mounting Hole For #8 Screw

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| MB2505W | MB2505W | 50V | 35V | 50V |
| MB251W | MB251W | 100V | 70V | 100V |
| MB252W | MB252W | 200V | 140V | 200V |
| MB254W | MB254W | 400V | 280V | 400V |
| MB256W | MB256W | 600V | 420V | 600V |
| MB258W | MB258W | 800V | 560V | 800V |
| MB2510W | MB2510W | 1000V | 700V | 1000V |

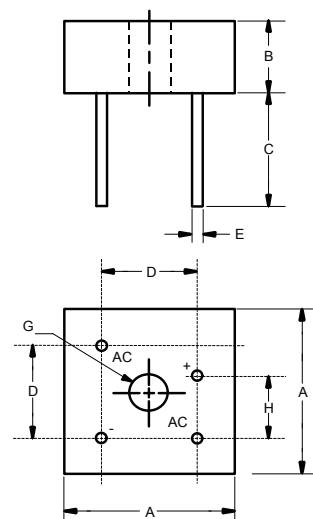
Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-------------|-------------|---|
| Average Forward Current | $I_{F(AV)}$ | 25A | $T_C = 55^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 300A | 8.3ms, Half Sine |
| Maximum Forward Voltage Drop Per Element | V_F | 1.2V | $I_{FM} = 12.5\text{A}; T_J = 25^\circ\text{C}$ |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I_R | 10µA 1mA | $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$ |
| Case to Terminal Isolation Voltage | V_{ISO} | 2.5KV | |

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7a.

**25 Amp
Single Phase
Bridge Rectifier
50 to 1000 Volts**

MB-35W



| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|-------|-------|-------|---------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | 1.115 | 1.135 | 28.33 | 28.83 | |
| B | 0.427 | 0.447 | 10.85 | 11.35 | |
| C | 0.774 | --- | 19.65 | --- | |
| D | 0.673 | 0.752 | 17.10 | 19.10 | |
| E | 0.038 | 0.042 | 0.96 | 1.07 | 4PL/TYP |
| G | 0.193 | --- | 4.90 | --- | Φ |
| H | 0.429 | 0.469 | 10.90 | 11.90 | |

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

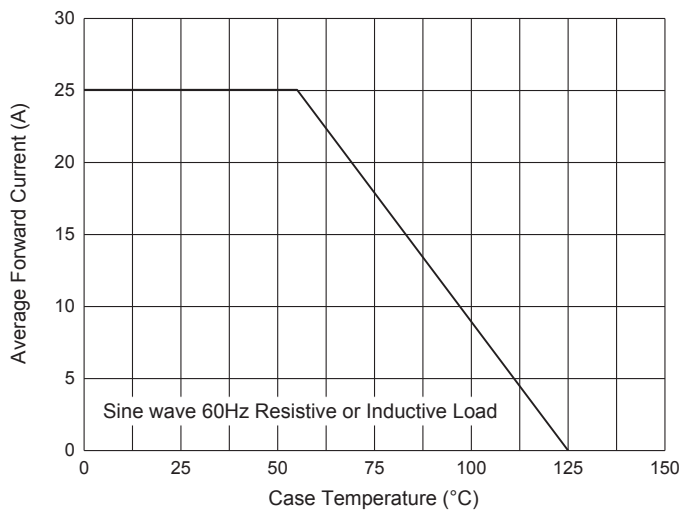


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

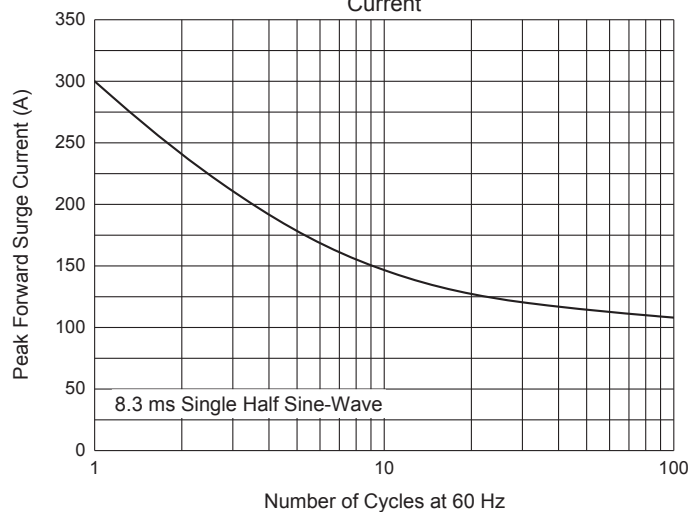


Fig. 3 - Typical Instantaneous Forward Characteristics

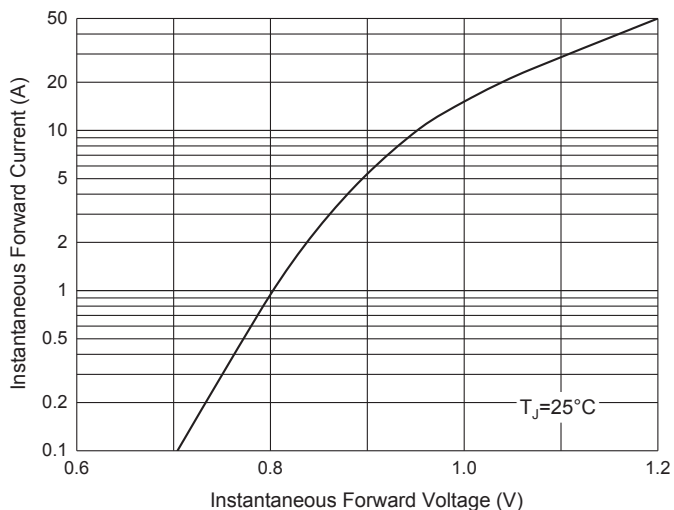
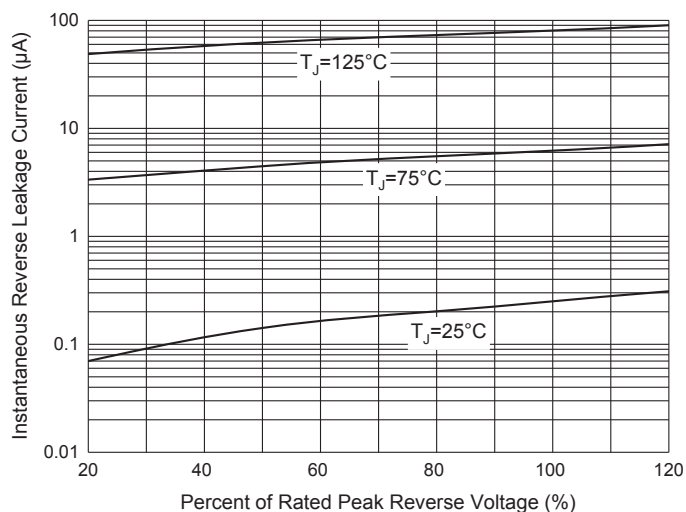


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

| Device | Packing |
|----------------|------------------------------|
| Part Number-BP | Bulk:50pcs/Box,400pcs/Carton |

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