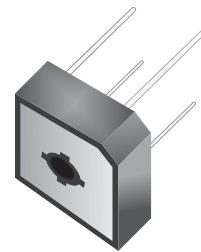


## MP10005G-G Thru. MP1010G-G

Reverse Voltage: 50 to 1000V

Forward Current: 10.0A

RoHS Device



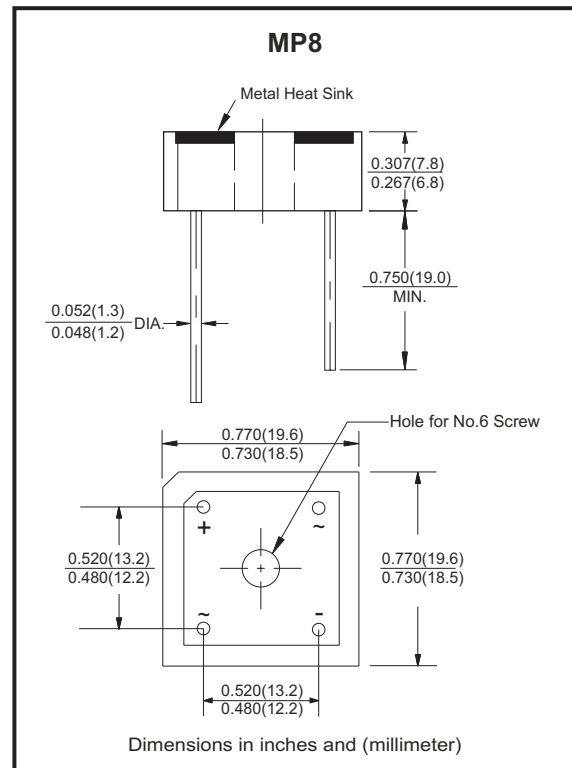
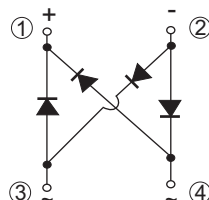
### Features

- Surge overload rating -175 amperes peak.
- Low forward voltage drop.
- Small size ; simple installation.
- Sliver plated copper leads.
- UL recognized file # E349301

### Mechanical Data

- Polarity: As marked on Body
- Mounting position: Any
- Weight: 7.33 grams

### Circuit Diagram



### Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave ,60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

| Parameter   | Symbol     | MP10<br>005G-G | MP10<br>01G-G | MP10<br>02G-G | MP10<br>04G-G | MP10<br>06G-G | MP10<br>08G-G | MP10<br>10G-G | Unit       |
|---|------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|------------|
| Maximum Recurrent Peak Reverse Voltage  | $V_{RRM}$  | 50             | 100           | 200           | 400           | 600           | 800           | 1000          | V          |
| Maximum RMS Bridge Input Voltage  | $V_{RMS}$  | 35             | 70            | 140           | 280           | 420           | 560           | 700           | V          |
| Maximum DC Blocking Voltage   | $V_{DC}$   | 50             | 100           | 200           | 400           | 600           | 800           | 1000          | V          |
| Maximum Average Forward Rectified Output Current at $T_A=50^\circ C$                                  | $I_{(AV)}$ | 10.0           |               |               |               |               |               |               | A          |
| Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed On Rated Load                   | $I_{FSM}$  | 175            |               |               |               |               |               |               | A          |
| Maximum Forward Voltage Drop Per Bridge Element at 5.0A Peak  | $V_F$      | 1.1            |               |               |               |               |               |               | V          |
| Maximum Reverse Current at Rate $T_J=25^\circ C$<br>DC Blocking Voltage Per Element $T_J=100^\circ C$ | $I_R$      | 10.0           |               |               |               |               |               |               | $\mu A$    |
|   |            | 1.0            |               |               |               |               |               |               | mA         |
| Operating Temperature Range   | $T_J$      | -55 to +150    |               |               |               |               |               |               | $^\circ C$ |
| Storage Temperature Range   | $T_{STG}$  | -55 to +150    |               |               |               |               |               |               | $^\circ C$ |

Company reserves the right to improve product design , functions and reliability without notice.

REV: C

## Rating and Characteristics Curves (MP10005G-G Thru. MP1010G-G)

Fig.1 - Derating Curve Output Rectified Current

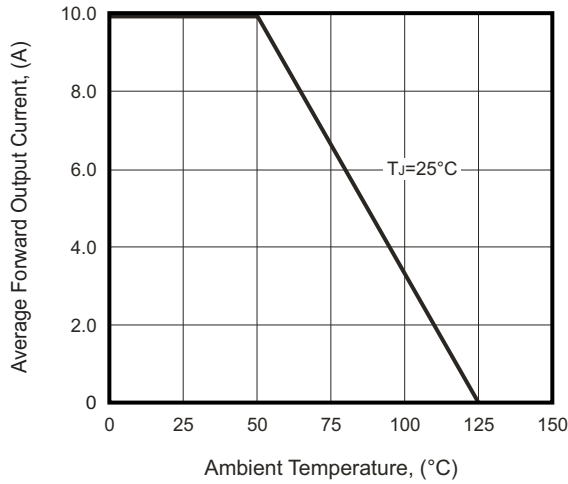


Fig.2 - Maximum Forward Surge Current

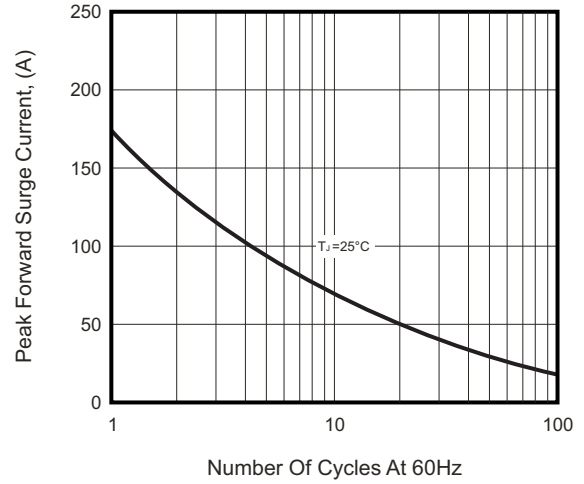


Fig.3 - Typical Forward Characteristics

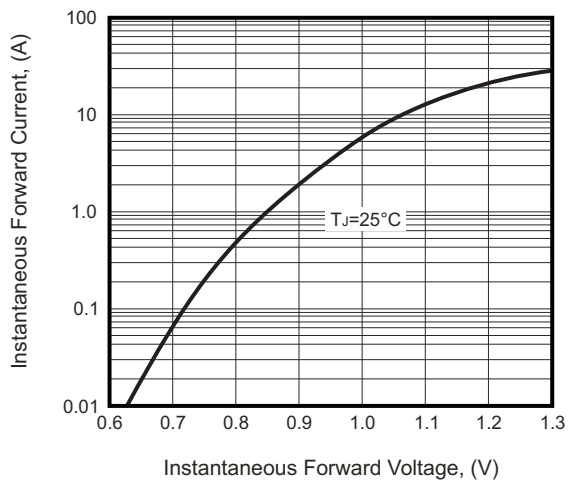


Fig.4 - Typical Reverse Characteristics

