

50.0 A Single-Phase Glass Passivated Bridge Rectifiers
Rectifier Reverse Voltage 50 to 1000V

Features

- Mounting Hole For #8 Screw
- Plastic Case with Metal Bottom
- Any Mounting Position
- Surge Rating Of 400 Amps
- Case Material: Molded Plastic. UL Flammability

Classification Rating 94V-0

Maximum Ratings

- Operating Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C

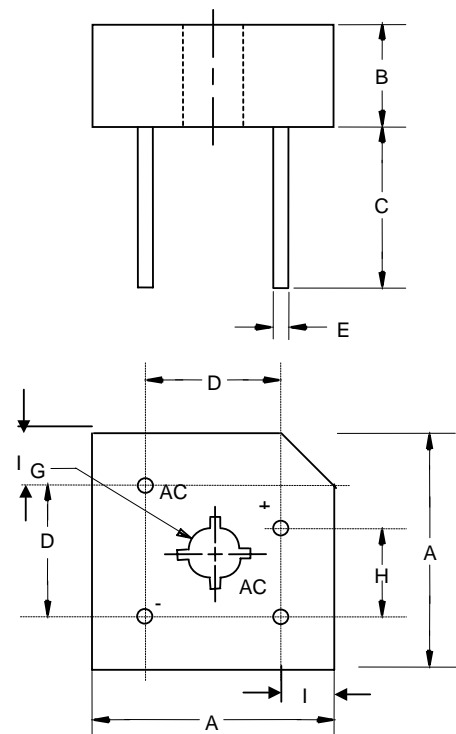
| ZENIVO Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------------|----------------|--|---------------------|-----------------------------|
| MP5005W | MP5005W | 50V | 35V | 50V |
| MP501W | MP501W | 100V | 70V | 100V |
| MP502W | MP502W | 200V | 140V | 200V |
| MP504W | MP504W | 400V | 280V | 400V |
| MP506W | MP506W | 600V | 420V | 600V |
| MP508W | MP508W | 800V | 560V | 800V |
| MP5010W | MP5010W | 1000V | 700V | 1000V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-------------|---------------------|---|
| Average Forward Current | $I_{F(AV)}$ | 50.0A | $T_C = 55^\circ C$ |
| Peak Forward Surge Current | I_{FSM} | 400A | 8.3ms, half sine |
| Maximum Forward Voltage Drop Per Element | V_F | 1.2V | $I_{FM} = 25A$ per element; $T_J = 25^\circ C^*$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 10 μ A 1.0mA | $T_J = 25^\circ C$ $T_J = 100^\circ C$ |
| Typical Thermal Resistance | R_{thJC} | 1.6°C/W | Per Leg |

*Pulse test: Pulse width 300 μ sec, Duty cycle 1%

MP-50W

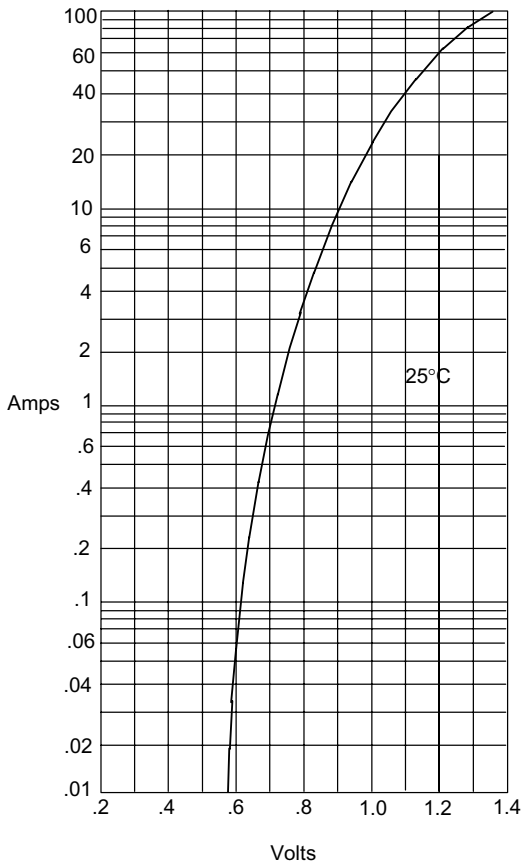


| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|-------|-------|-------|---------------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | 1.118 | 1.130 | 28.40 | 28.70 | |
| B | .432 | .442 | 10.97 | 11.23 | |
| C | .769 | --- | 19.53 | --- | |
| D | .673 | .752 | 17.10 | 19.10 | |
| E | .038 | .042 | .97 | 1.07 | 4PL/TYP |
| G | .193 | --- | 4.90 | --- | \varnothing |
| H | .429 | .468 | 10.90 | 11.90 | |
| i | .169 | .236 | 4.30 | 6.00 | |

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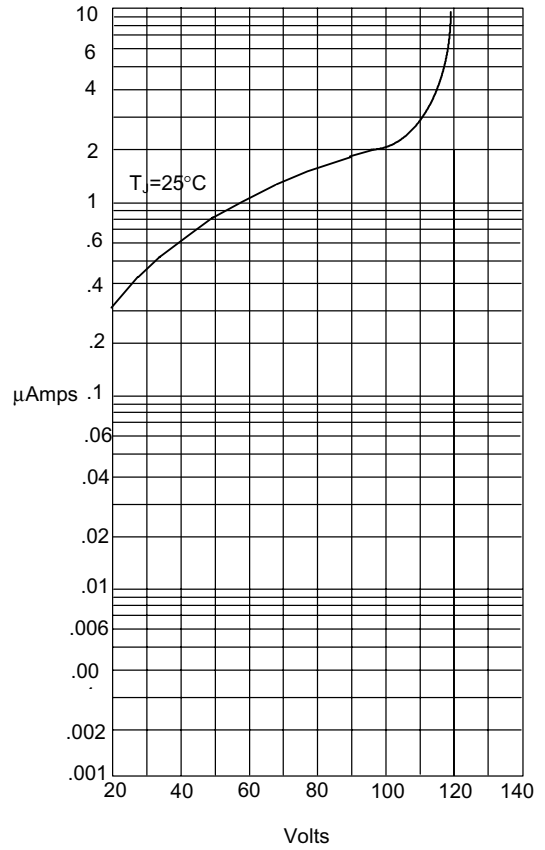
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Figure 1
Typical Forward Characteristics



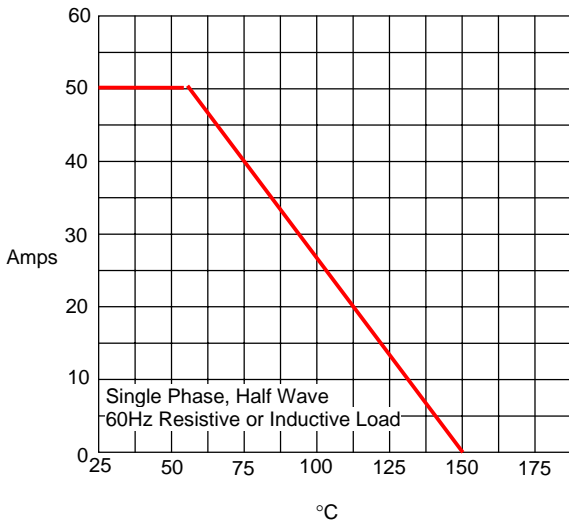
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



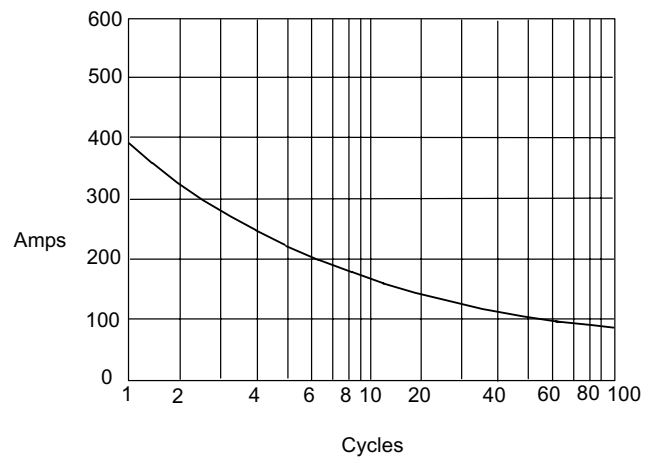
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*
Case Temperature - °C

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles