

MP2505 THRU MP2510

Features

- Mounting Hole For #8 Screw
- Plastic Case With Metal Bottom
- Any Mounting Position
- Surge Rating Of 300 Amps

25 Amp Single Phase Bridge Rectifier 50 to 1000 Volts

Maximum Ratings

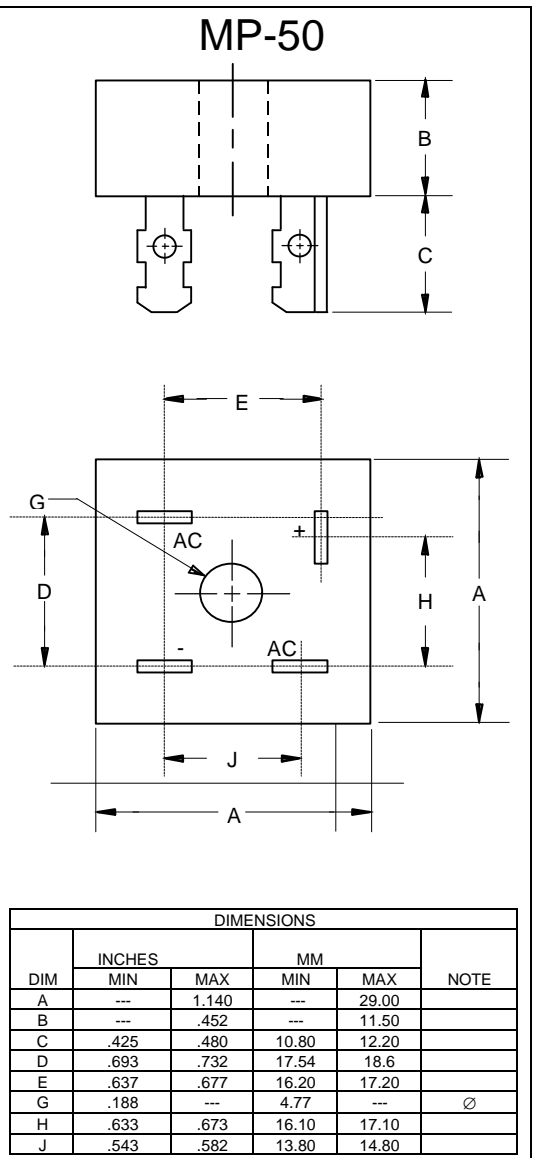
- Operating Temperature: -55°C to +175°C
- Storage Temperature: -55°C to +175°C

Microsemi Catalog Number	Device Marking	Maximum Reccurent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MP2505	MP2505	50V	35V	50V
MP251	MP251	100V	70V	100V
MP252	MP252	200V	140V	200V
MP254	MP254	400V	280V	400V
MP256	MP256	600V	420V	600V
MP258	MP258	800V	560V	800V
MP2510	MP2510	1000v	700V	1000v

Electrical Characteristics @ 25°C Unless Otherwise Specified

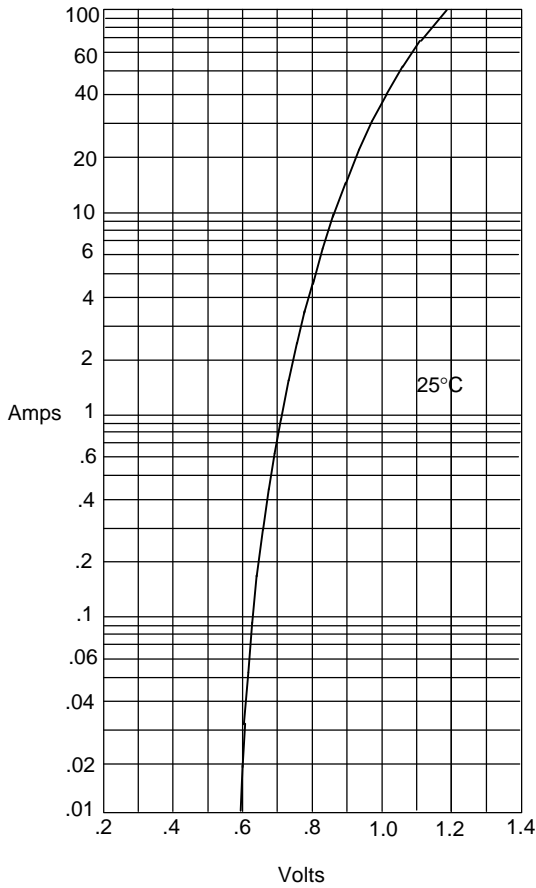
Average Forward Current	$I_{F(AV)}$	25.0A	$T_J = 55^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	300A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	V_F	1.1V	$I_{FM} = 12.5\text{A}$ per element; $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10 μA 0.5mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$

*Pulse test: Pulse width 300 μsec , Duty cycle 1%



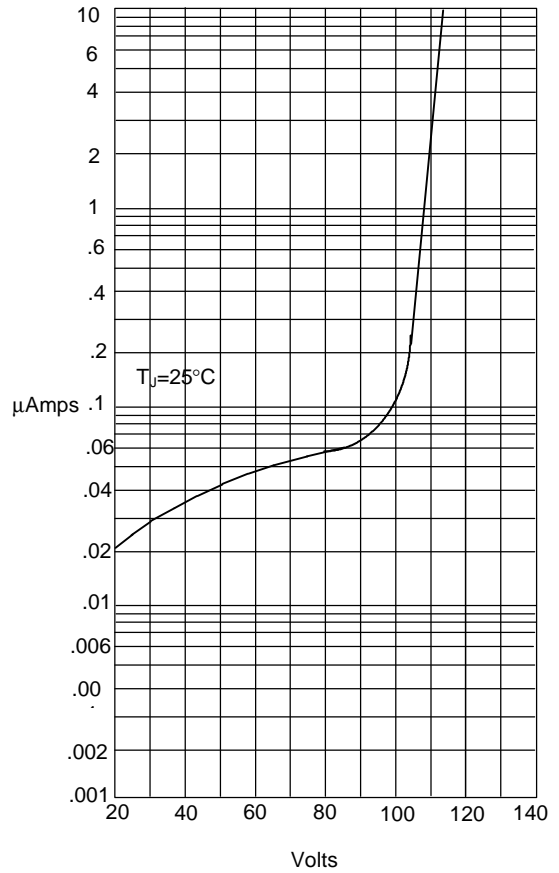
MP2505 thru MP2510

Figure 1
Typical Forward Characteristics



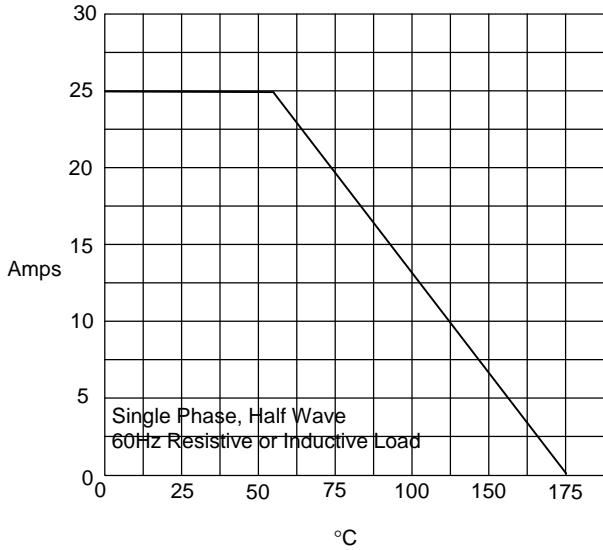
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



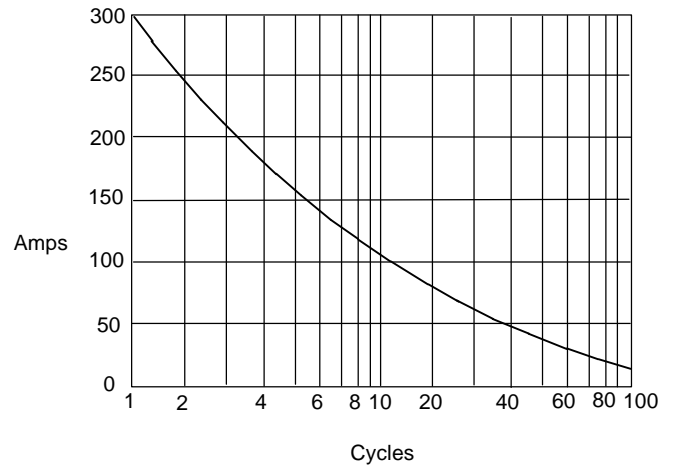
Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes versus
Ambient Temperature - °C

Figure 4
Peak Forward Surge Current



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