

**MP2505W  
THRU  
MP2510W**

**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**

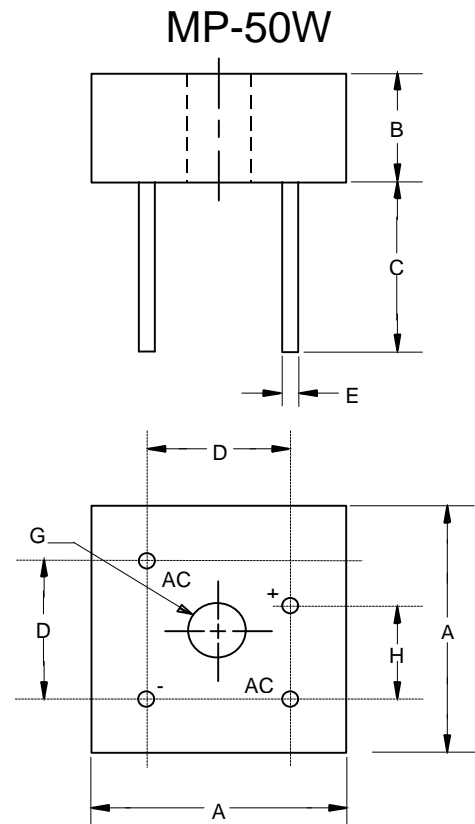
- Operating Temperature: -55°C to +175°C
- Storage Temperature: -55°C to +175°C

Microsemi Catalog Number	Device Marking	Maximum Reccurent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MP2505W	MP2505W	50V	35V	50V
MP251W	MP251W	100V	70V	100V
MP252W	MP252W	200V	140V	200V
MP254W	MP254W	400V	280V	400V
MP256W	MP256W	600V	420V	600V
MP258W	MP258W	800V	560V	800V
MP2510W	MP2510W	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	$I_R$	10µA 0.5mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$

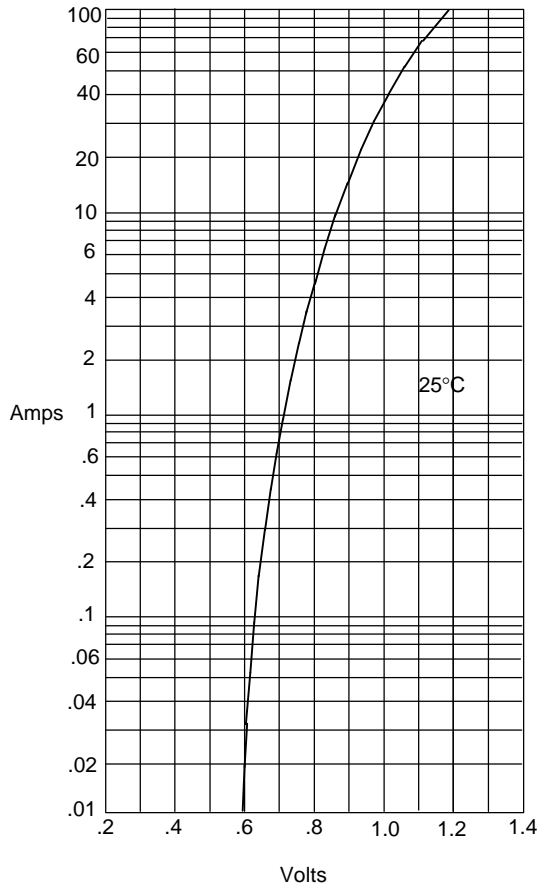
\*Pulse test: Pulse width 300 µsec, Duty cycle 1%



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	---	1.140	---	29.00	
B	---	.452	---	11.50	
C	---	.750	---	19.10	
D	.692	.732	17.6	18.6	
E	.040	---	1.00	---	4PL/TYP
G	.188	---	4.77	---	∅
H	.429	.468	10.9	11.9	

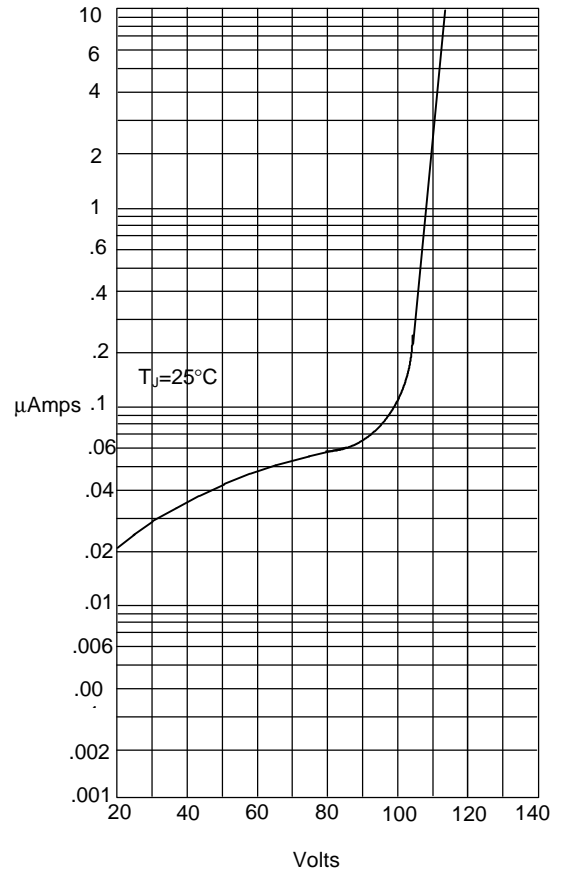
# MP2505W thru MP2510W

Figure 1  
Typical Forward Characteristics



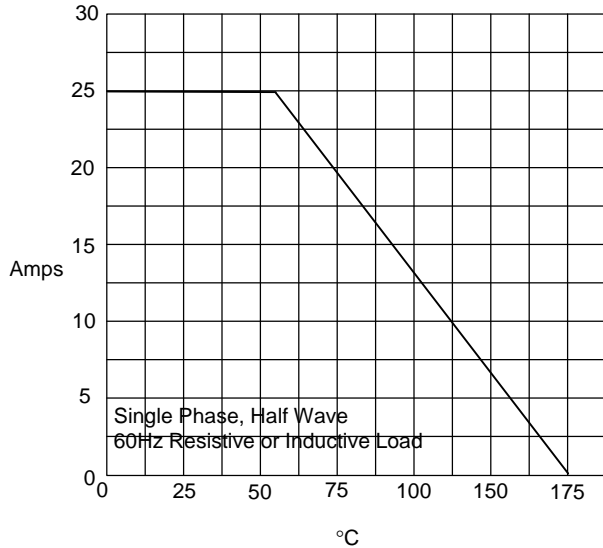
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



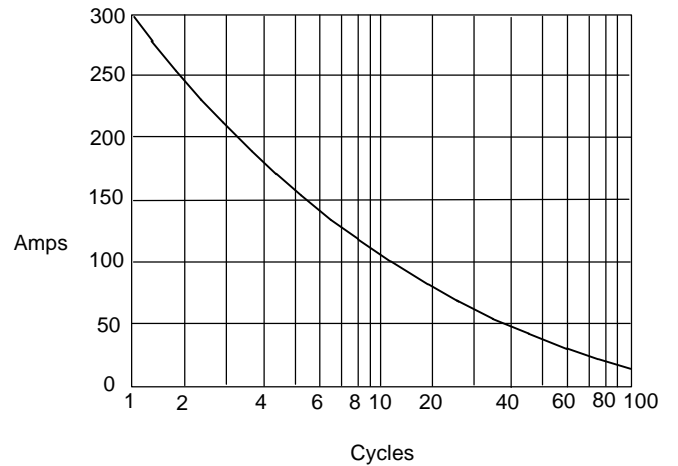
Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

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