



Micro Commercial Components
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MB4005W THRU MB4010W

www.mccsemi.com

Features

- Mounting Hole For #8 Screw
- Plastic Case With Metal Bottom
- Any Mounting Position
- Surge Rating Of 400 Amps

Maximum Ratings

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

MCC Catalog Number	Device Marking	Maximum Reccurent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MB4005W	MB4005W	50V	35V	50V
MB401W	MB401W	100V	70V	100V
MB402W	MB402W	200V	140V	200V
MB404W	MB404W	400V	280V	400V
MB406W	MB406W	600V	420V	600V
MB408W	MB408W	800V	560V	800V
MB4010W	MB4010W	1000v	700V	1000v

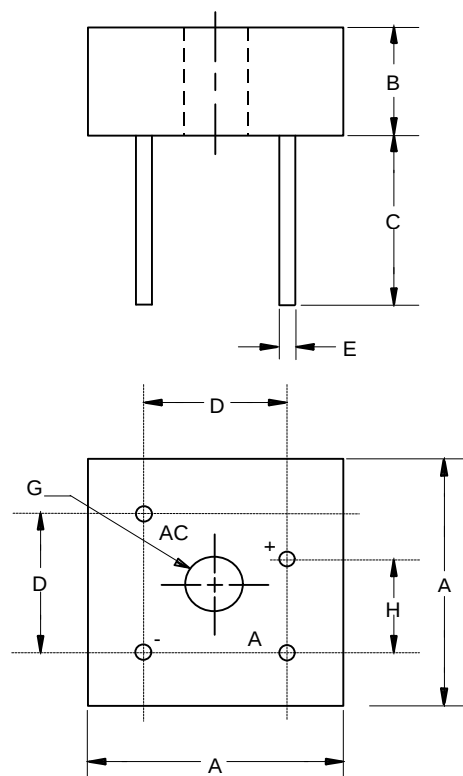
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	40.0A	$T_J = 55^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	400A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	V_F	1.2V	$I_{FM} = 20\text{A per element};$ $T_J = 25^\circ\text{C}^*$
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%

40 Amp Single Phase Bridge Rectifier 50 to 1000 Volts

MB-50W

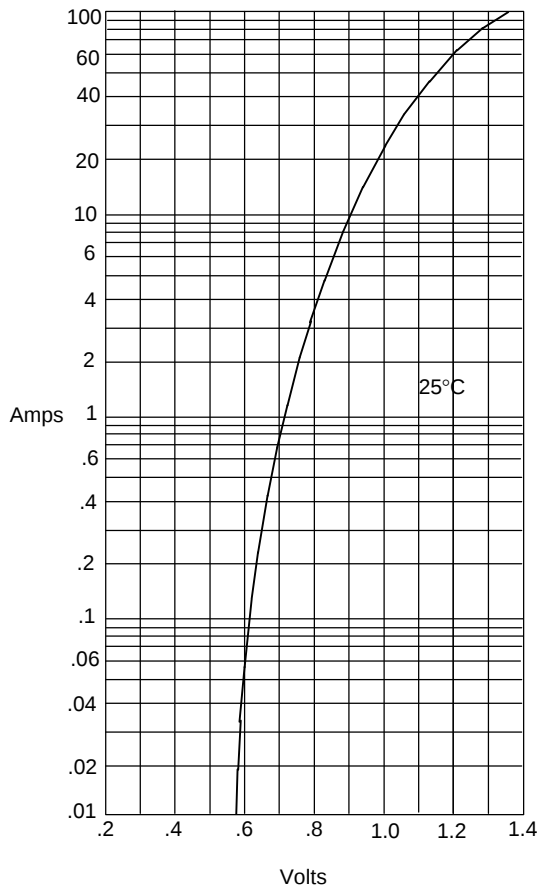


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	---	1.140	---	29.00	
B	---	.452	---	11.50	
C	---	.750	---	19.10	
D	.692	.732	17.6	18.6	
E	.040	---	1.00	---	4PL/TYP
G	.188	---	4.77	---	$\varnothing$
H	.429	.468	10.9	11.9	

MB4005W thru MB4010W

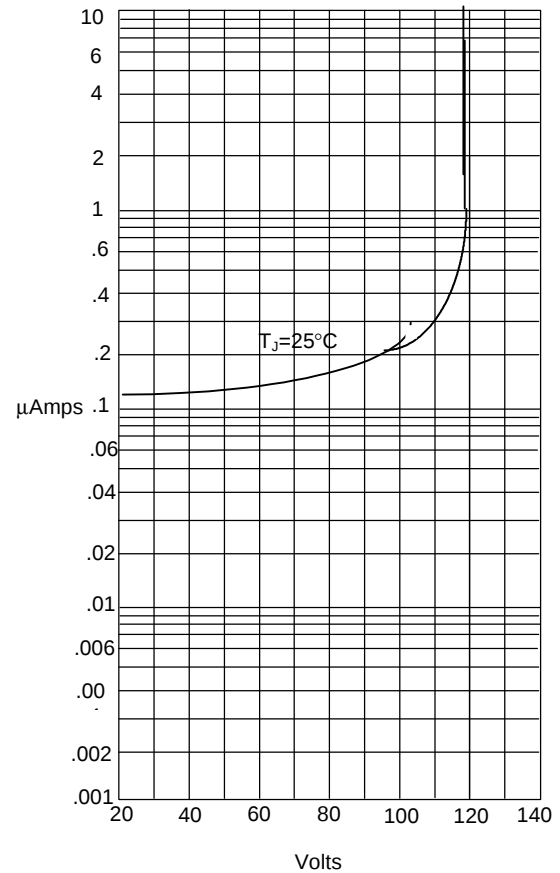


Figure 1
Typical Forward Characteristics



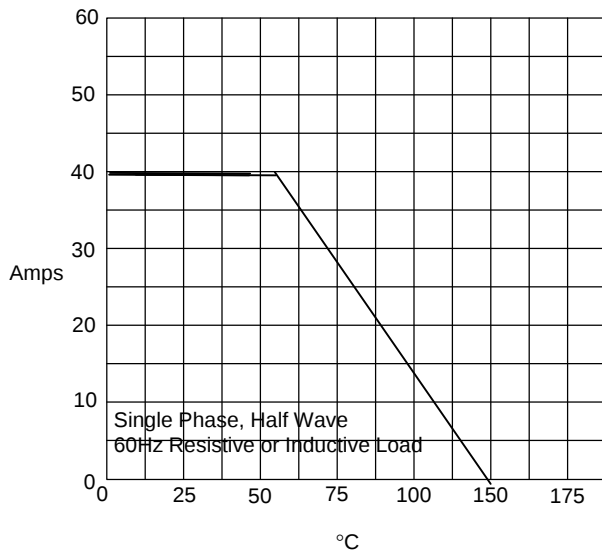
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



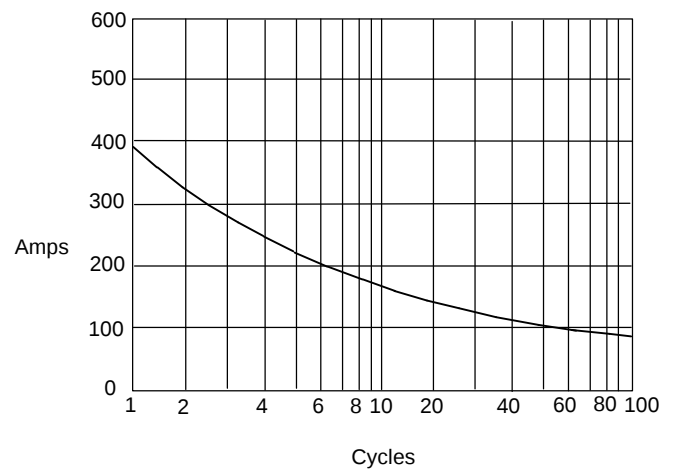
Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

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