



Micro Commercial Components



Micro Commercial Components  
 20736 Marilla Street Chatsworth  
 CA 91311  
 Phone: (818) 701-4933  
 Fax: (818) 701-4939

**MB2505W  
 THRU  
 MB2510W**

**Features**

- Mounting Hole For #8 Screw
- High Conductivity Metal Case
- Any Mounting Position
- Case to Terminal Isolation Voltage 2500V
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

**Maximum Ratings**

- Mounting Torque: 20 in-lbs Maximum
- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MB2505W	MB2505W	50V	35V	50V
MB251W	MB251W	100V	70V	100V
MB252W	MB252W	200V	140V	200V
MB254W	MB254W	400V	280V	400V
MB256W	MB256W	600V	420V	600V
MB258W	MB258W	800V	560V	800V
MB2510W	MB2510W	1000V	700V	1000V

**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Forward Current	$I_{F(AV)}$	25.0A	$T_C = 55^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	300A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	$V_F$	1.2V	$I_{FM} = 12.5\text{A per element};$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10µA 1mA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7

**25 Amp Single Phase  
 Bridge Rectifier  
 50 to 1000 Volts**

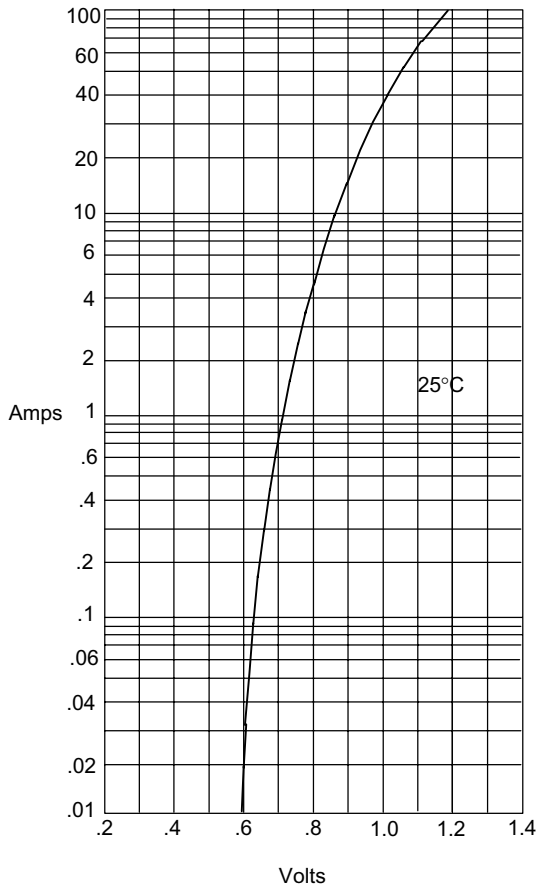
**MB-35W**

The drawing shows a top view of the bridge rectifier with dimensions A through H. Dimension A is the width of the case, B is the height of the case, C is the height of the mounting hole, D is the distance between the AC terminals, E is the width of the mounting hole, G is the distance from the AC terminal to the DC terminal, and H is the distance between the DC terminals. The pinout diagram shows a bridge rectifier with AC terminals and DC terminals.

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.115	1.135	28.33	28.83	
B	.427	.447	10.85	11.35	
C	.774	-----	19.65	-----	
D	.673	.752	17.10	19.10	
E	.038	.042	0.96	1.07	4PL/TYP
G	.193	---	4.90	---	∅
H	.429	.469	10.90	11.90	

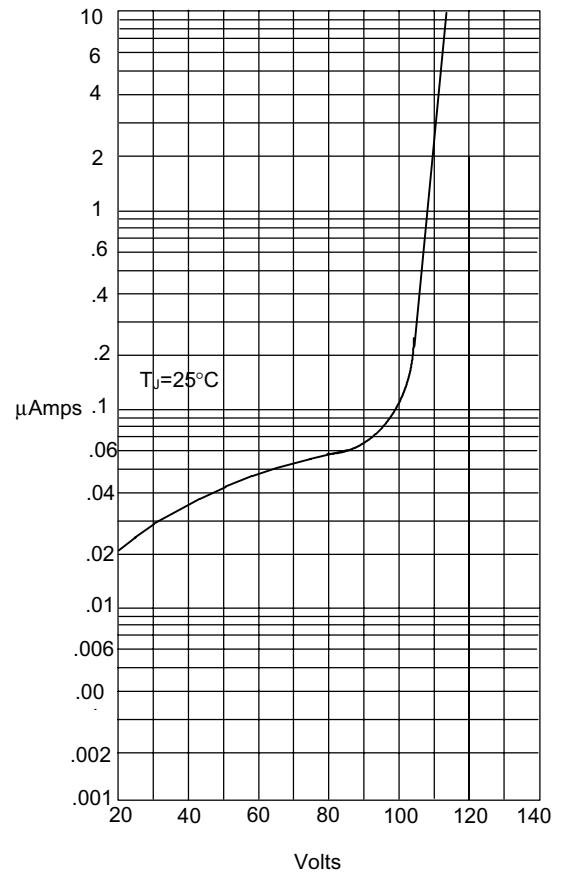
# MB2505W thru MB2510W

Figure 1  
Typical Forward Characteristics



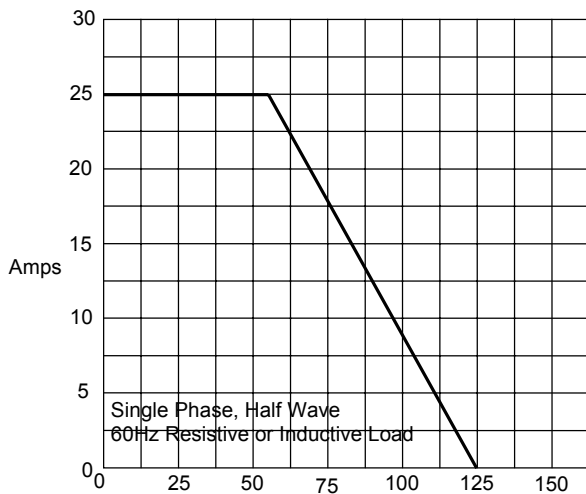
Instantaneous Forward Current - Amperes versus Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



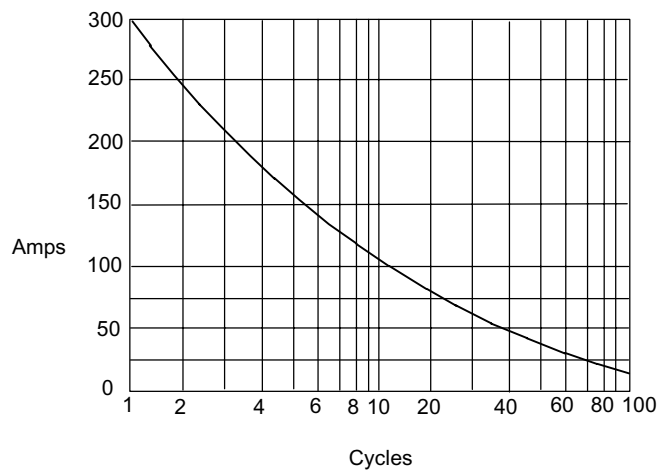
Instantaneous Reverse Leakage Current - MicroAmperes versus Percent Of Rated Peak Reverse Voltage - Volts

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



Micro Commercial Components

## Ordering Information

Device (Part Number)-BP	Packing Bulk;400Pcs/Ctn
----------------------------	----------------------------

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

### \*\*\*IMPORTANT NOTICE\*\*\*

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

### \*\*\*LIFE SUPPORT\*\*\*

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

### \*\*\*CUSTOMER AWARENESS\*\*\*

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.