



Micro Commercial Components



Micro Commercial Components  
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**MB2505W  
 THRU  
 MB2510W**

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

**Features**

- Mounting Hole For #8 Screw
- High Conductivity Metal Case
- Any Mounting Position
- Case to Terminal Isolation Voltage 2500V
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Lead Free Finish/RoHS Compliant (NOTE 1) ("P" Suffix designates RoHS Compliant. See ordering information)

**Maximum Ratings**

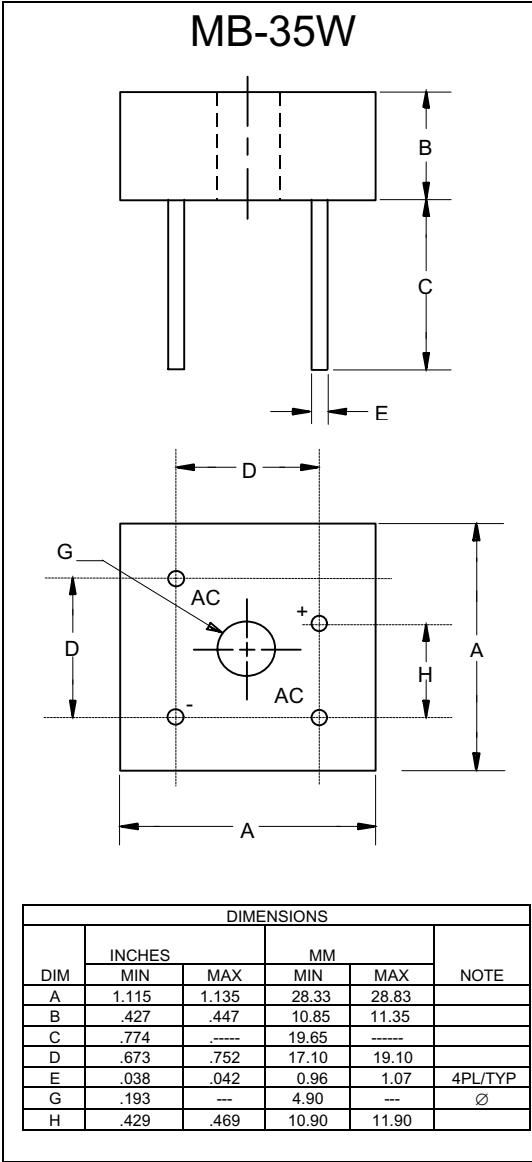
- Mounting Torque: 20 in-lbs Maximum
- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989

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**

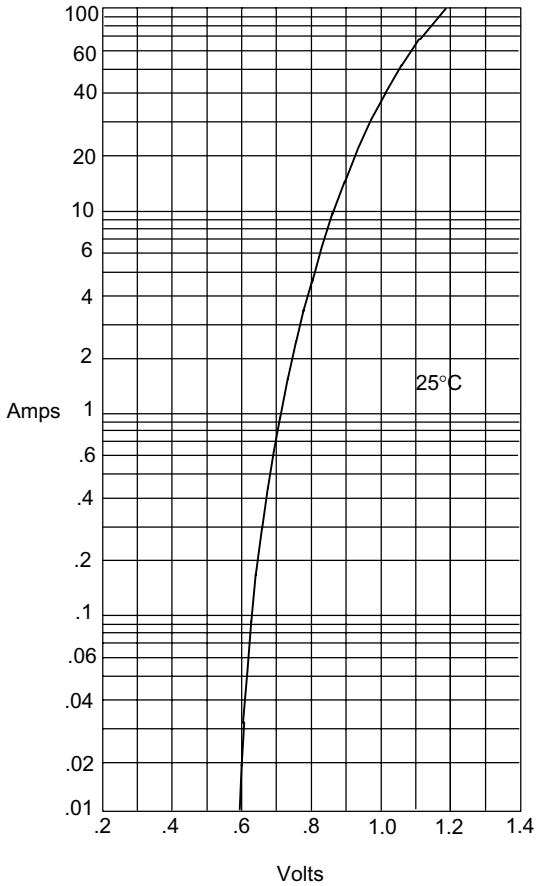
Average Forward Current	$I_{F(AV)}$	25.0A	$T_C = 55^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	300A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	$V_F$	1.2V	$I_{FM} = 12.5\text{A per element}; T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10µA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



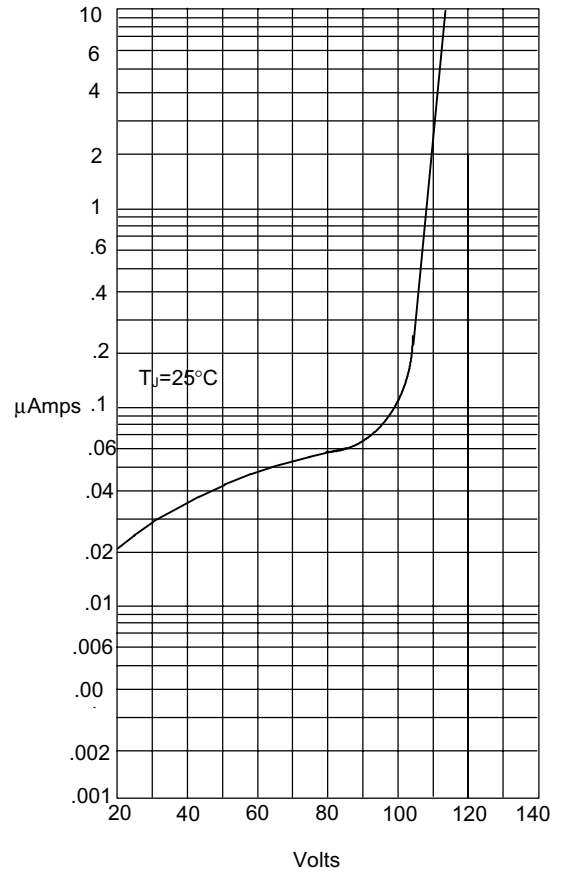
**MB2505W thru MB2510W**

Figure 1  
Typical Forward Characteristics



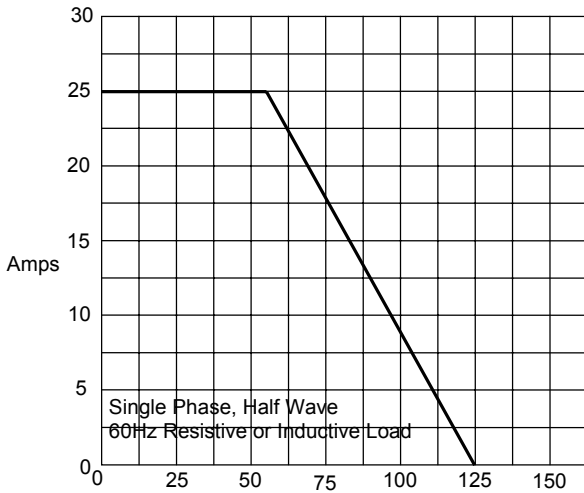
Instantaneous Forward Current - Amperes versus Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



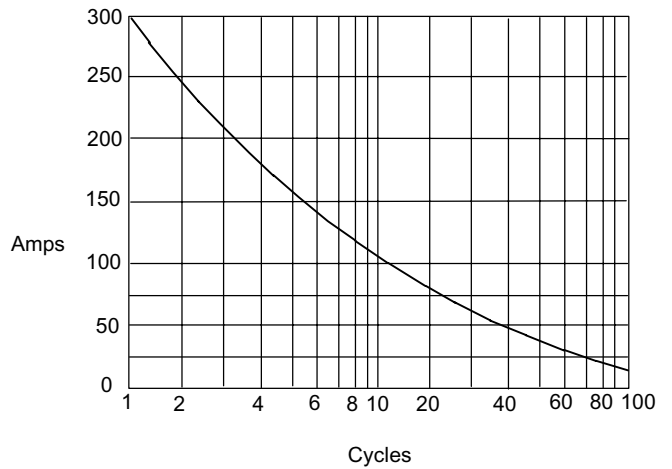
Instantaneous Reverse Leakage Current - MicroAmperes versus Percent Of Rated Peak Reverse Voltage - Volts

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



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## Ordering Information

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