



Micro Commercial Components

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# MB2505 THRU MB2510

## Features

- Mounting Hole For #10 Screw
- High Conductivity Metal Case
- Any Mounting Position
- Surge Rating Of 300 Amps
- 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

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989

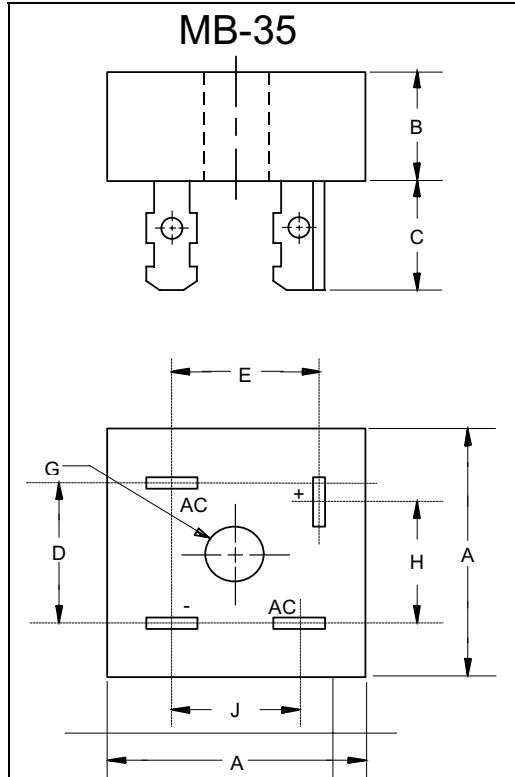
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MB2505	MB2505	50V	35V	50V
MB251	MB251	100V	70V	100V
MB252	MB252	200V	140V	200V
MB254	MB254	400V	280V	400V
MB256	MB256	600V	420V	600V
MB258	MB258	800V	560V	800V
MB2510	MB2510	1000V	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

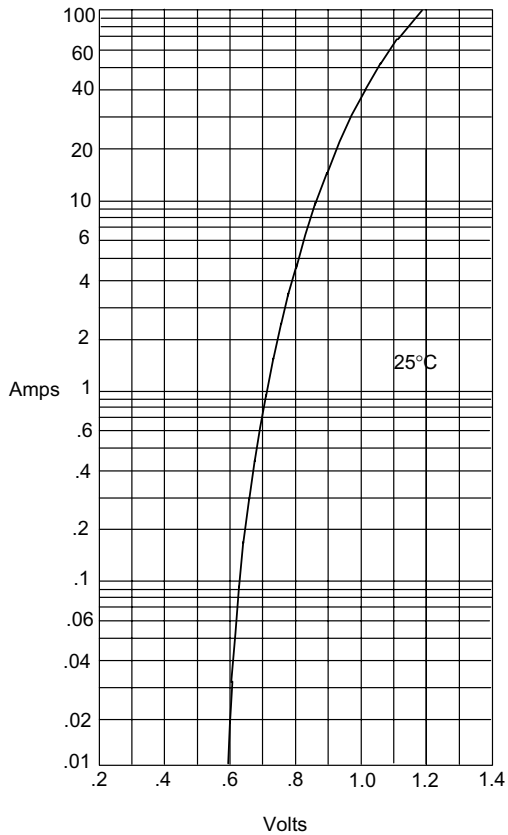
## 25 Amp Single Phase Bridge Rectifier 50 to 1000 Volts



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	1.115	1.135	28.33	28.83	
B	.427	.447	10.85	11.35	
C	.428	.468	10.87	11.89	
D	.688	.730	17.48	18.50	
E	.618	.658	15.70	16.71	
G	.200	---	5.08	---	∅
H	.618	.658	15.70	16.71	
J	.530	.570	13.46	14.48	

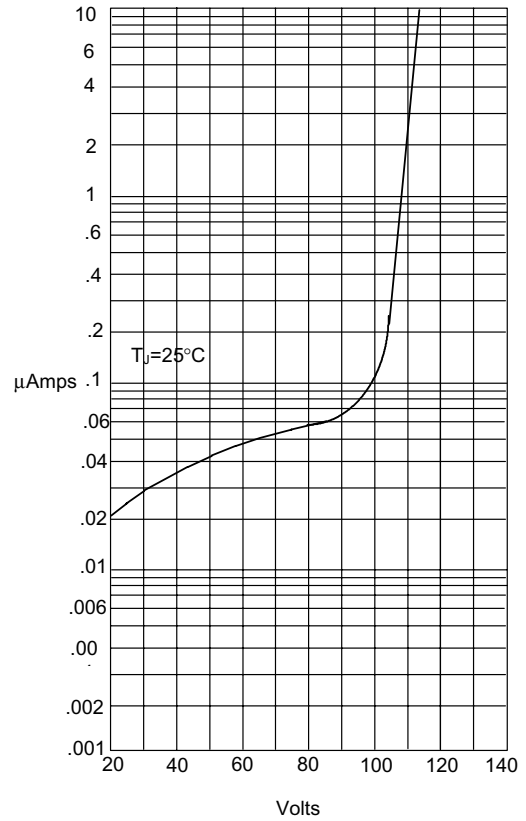
## MB2505 thru MB2510

Figure 1  
Typical Forward Characteristics



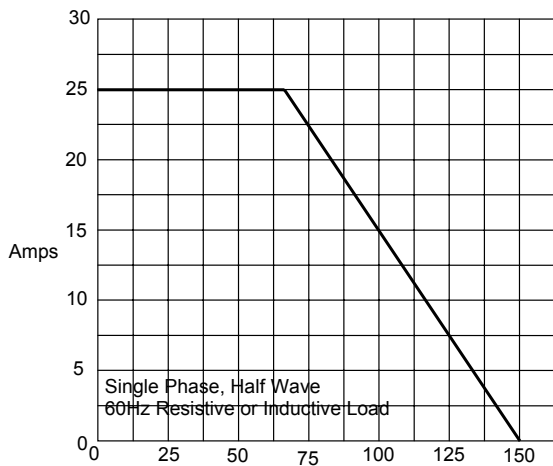
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



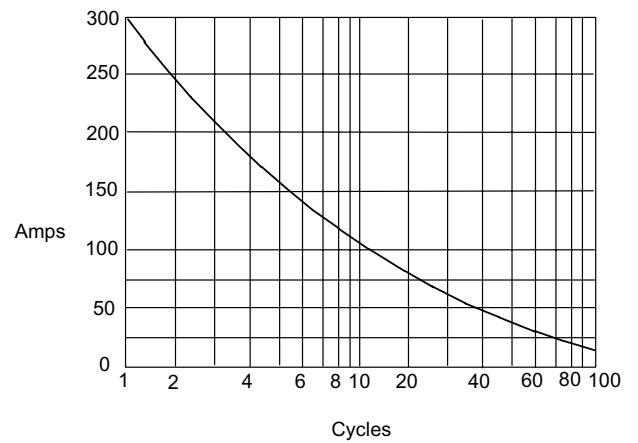
Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

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	Packing
(Part Number)-BP	Bulk;50pcs/Box

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