

MB1005 THRU MB1010

Features

- Mounting Hole For #6 Screw
- Any Mounting Position
- Surge Rating Of 150 Amps
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (NOTE 1) ("P" Suffix designates RoHS Compliant. See ordering information)

Maximum Ratings

- Maximum Mounting Torque: 4.5 in-lbs.
- UL Recognized File # E165989
- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance: 5°C/W Junction to case

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MB1005	MB1005	50V	35V	50V
MB101	MB101	100V	70V	100V
MB102	MB102	200V	140V	200V
MB104	MB104	400V	280V	400V
MB106	MB106	600V	420V	600V
MB108	MB108	800V	560V	800V
MB1010	MB1010	1000v	700V	1000v

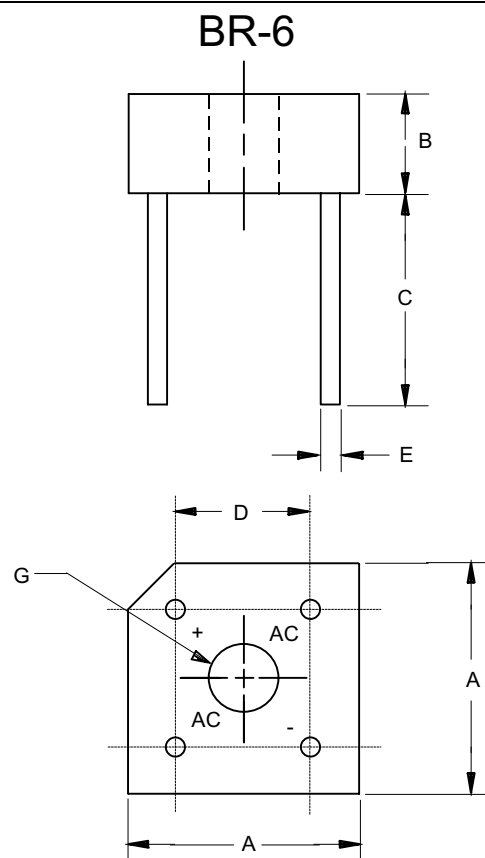
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10.0A	$T_c = 50^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	150A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	V_F	1.1V	$I_{FM} = 5.0\text{A}$ per element; $T_J = 25^\circ\text{C}$ (Note 2)
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10 μA 1.0mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$

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

2. Pulse Test: Pulse Width 300usec, Duty Cycle 1%

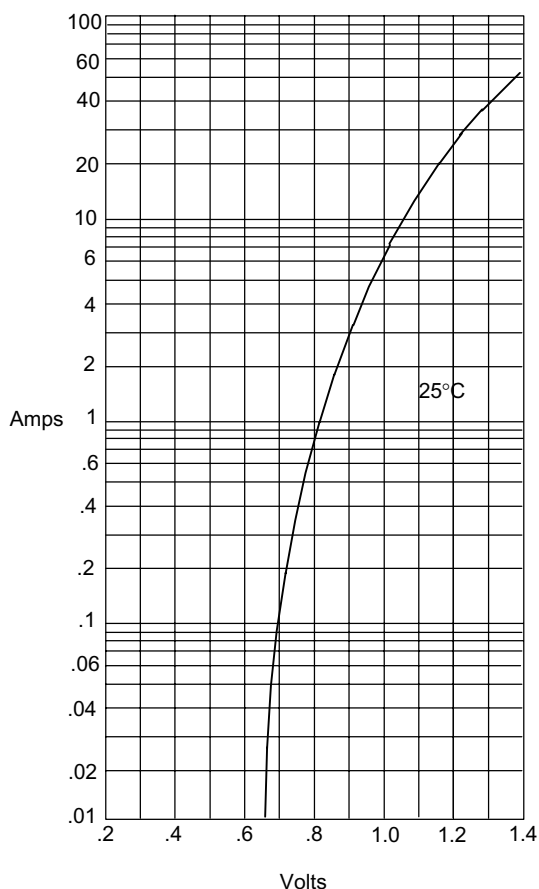
10 Amp Single Phase Bridge Rectifier 50 to 1000 Volts



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.578	.618	14.69	15.71	2PL
B	.230	.270	5.84	6.86	
C	.750	---	19.10	---	
D	.405	.444	10.30	11.30	2PL
E	.038	.042	0.97	1.07	4PL/TYP
G	.145	---	3.70	---	Ø

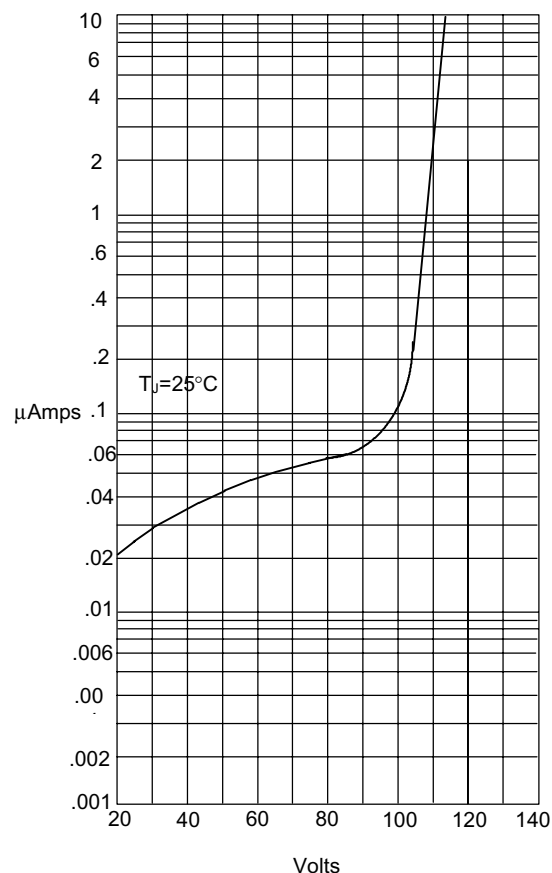
MB1005 thru MB1010

Figure 1
Typical Forward Characteristics



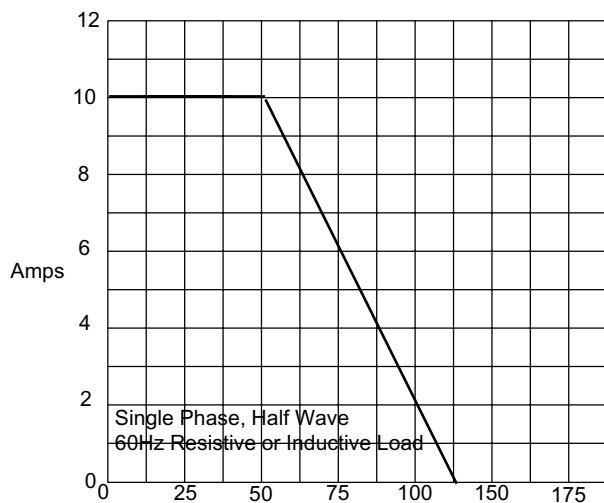
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



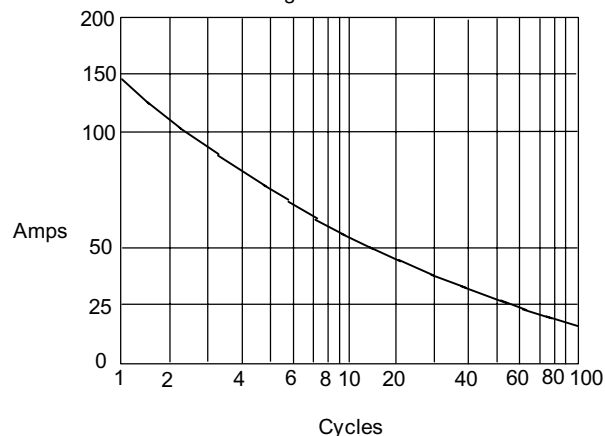
Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

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: 1.6kpcs/Ctn

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