

# PB305 THRU PB310

## Features

- Mounting Hole For #6 Screw
- UL Recognized File # E165989
- Any Mounting Position
- Surge Rating Of 50 Amps
- Low Forward Voltage Drop
- 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

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Mounting Torque: 4.5 in-lbs Maximum

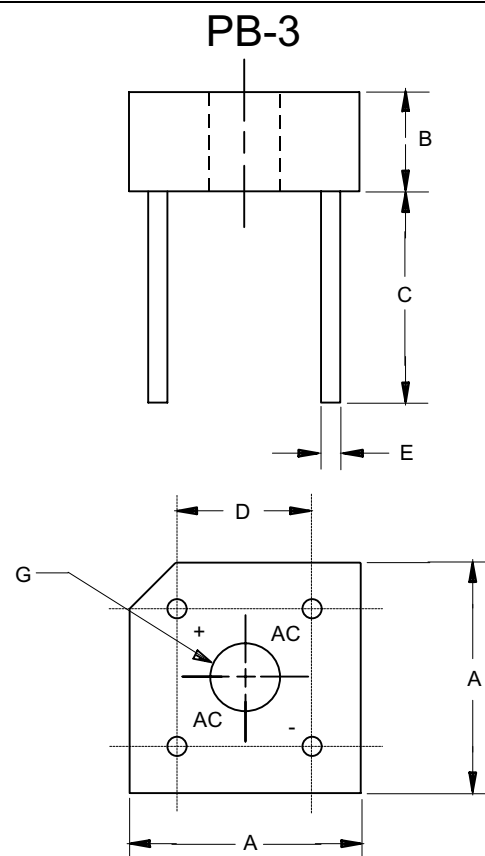
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
PB305	PB305	50V	35V	50V
PB31	PB31	100V	70V	100V
PB32	PB32	200V	140V	200V
PB34	PB34	400V	280V	400V
PB36	PB36	600V	420V	600V
PB38	PB38	800V	560V	800V
PB310	PB310	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	3.0A	$T_C = 50^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	50A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	$V_F$	1.2V	$I_{FM} = 1.5\text{A}$ per element; $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10μA 1 mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$

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

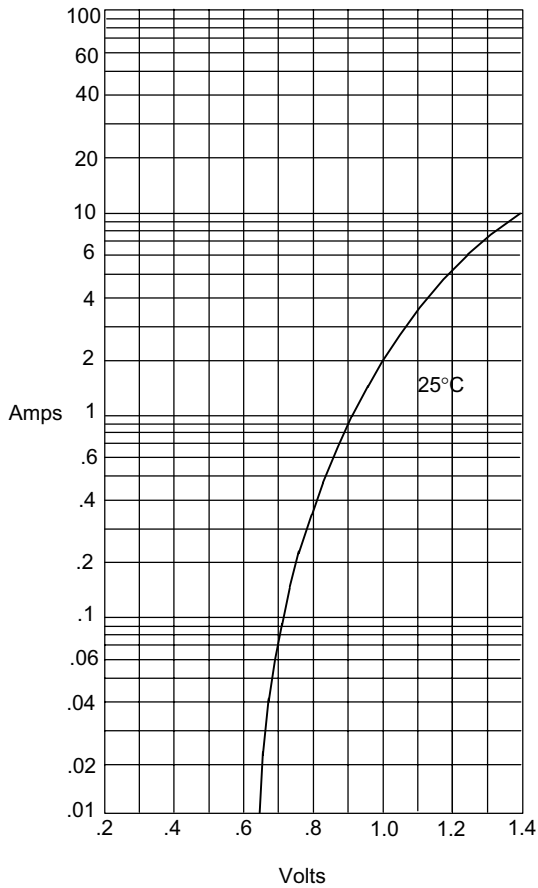
## 3 Amp Single Phase Bridge Rectifier 50 to 1000 Volts



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.580	.620	14.69	15.71	2PL
B	.230	.270	5.84	6.86	
C	.750	---	19.00	---	
D	.405	.445	10.29	11.31	2PL
E	.028	.032	0.71	0.81	4PL/TYP
G	.142	.158	3.60	4.00	Ø

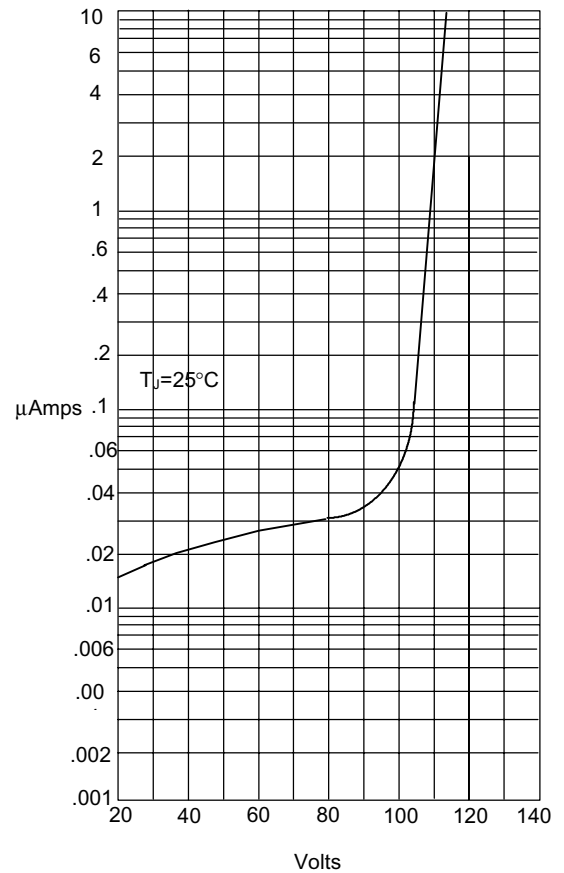
## PB305 thru PB310

Figure 1  
Typical Forward Characteristics



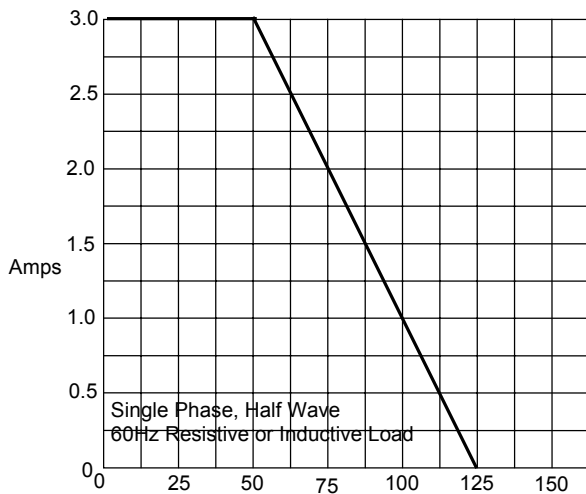
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



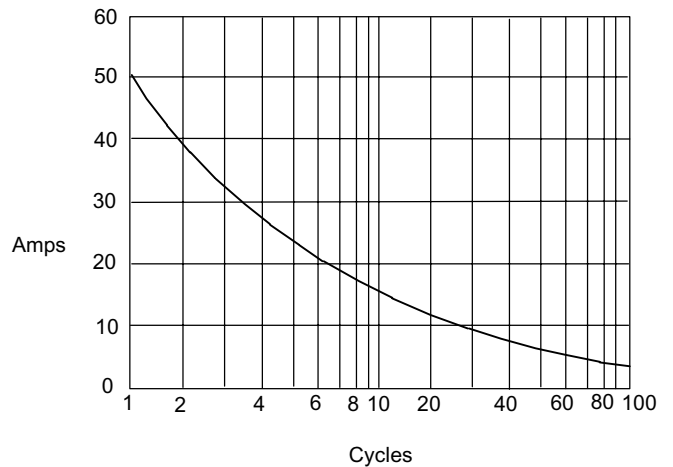
Instantaneous Reverse Leakage Current - MicroAmperes *versus*  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*  
Case Temperature - °C

Figure 4  
Maximum Non-Repetitive 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;1.6k/Ctn

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

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