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PB305CA THRU PB310CA

Features

- Mounting Hole For #6 Screw
- Plastic Case
- Any Mounting Position
- Surge Rating Of 50 Amps
- Low Forward Voltage Drop

Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C

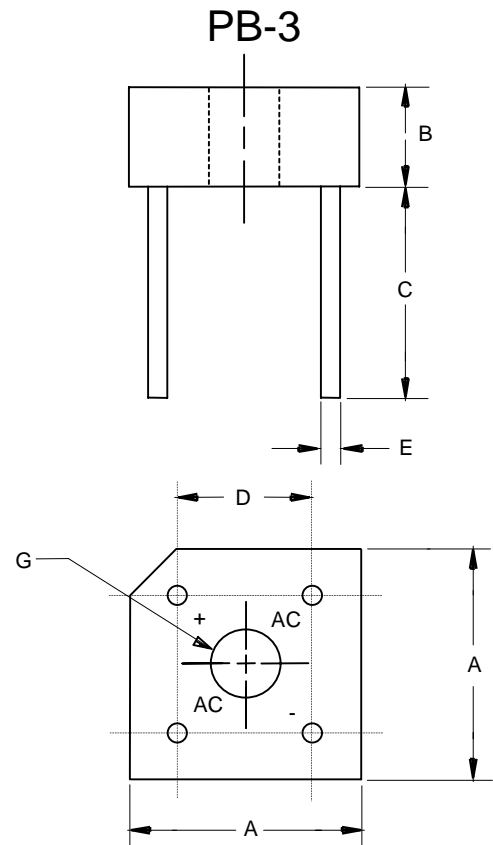
Microsemi Part Number	Maximum DC Blocking Voltage	Maximum RMS Voltage	Minimum Controlled Avalanche Voltage	Maximum Controlled Avalanche Voltage
PB305CA	50V	35V	100V	550V
PB31CA	100V	70V	150V	600V
PB32CA	200V	140V	250V	700V
PB34CA	400V	280V	450V	900V
PB36CA	600V	420V	650V	1100V
PB38CA	800V	560V	850V	1300V
PB310CA	1000V	700V	1050V	1500V

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	1.0V	$I_{FM} = 1.5\text{A}$ per element; $T_A = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10 μA 0.1mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$

*Pulse test: Pulse width 300 μsec , Duty cycle 1%

3 Amp Bridge Rectifier Controlled Avalanche 50 to 1000 Volts

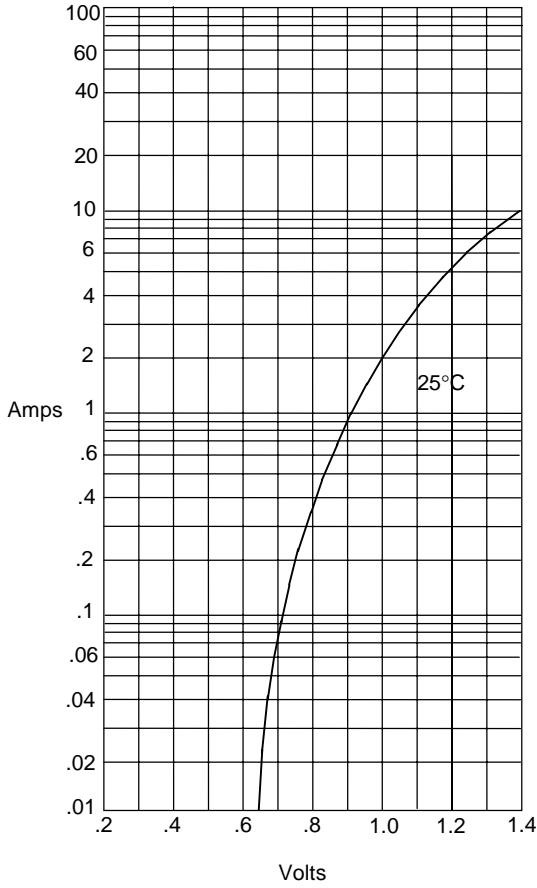


DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	---	.610	---	15.50	2PL
B	---	.200	---	5.08	
C	---	.750	---	19.20	
D	.405	.444	10.30	11.30	2PL
E	.030	---	1.00	---	4PL/TYP
G	.145	---	3.70	---	\varnothing

PB305CA thru PB310CA

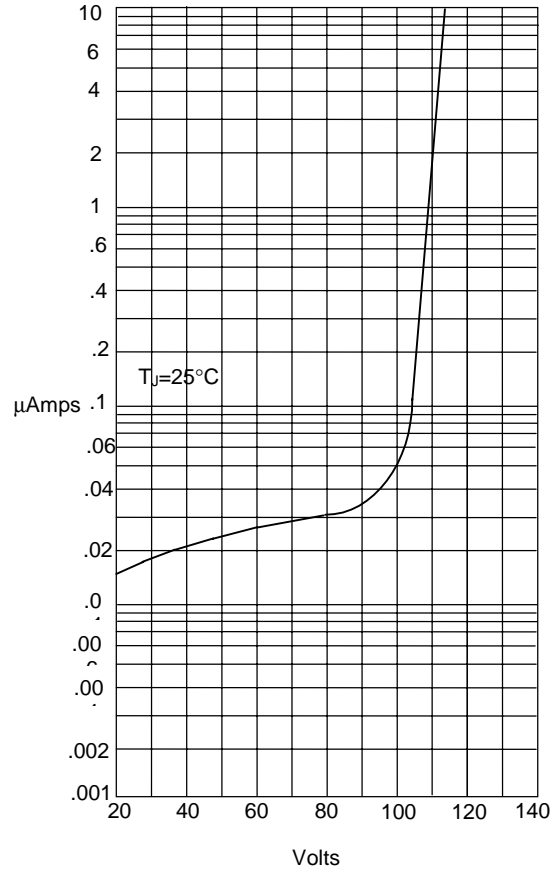


Figure 1
Typical Forward Characteristics



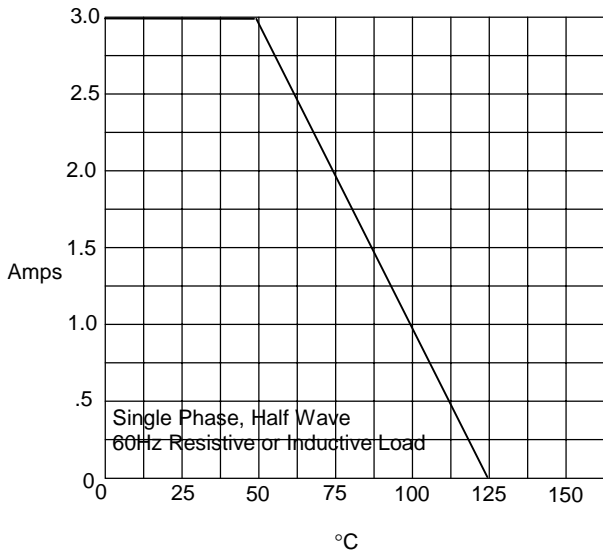
Instantaneous Forward Current - Amperes versus Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



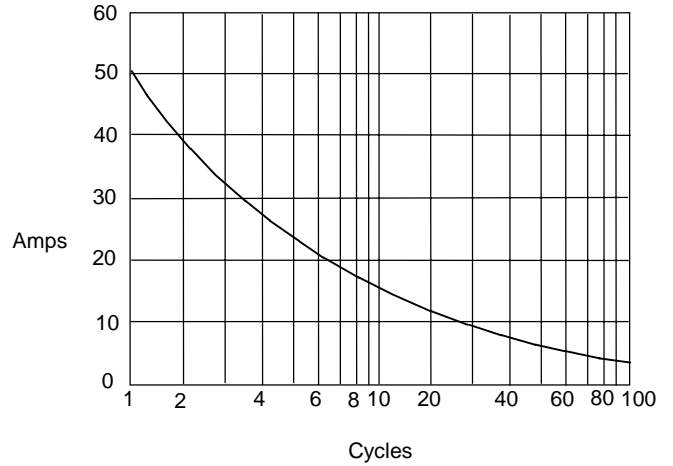
Instantaneous Reverse Leakage Current - MicroAmperes versus Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes versus Ambient Temperature - °C

Figure 4
Maximum Non-Repetitive Forward Surge Current



Peak Forward Surge Current - Amperes versus Number Of Cycles At 60Hz - Cycles