



**Features**

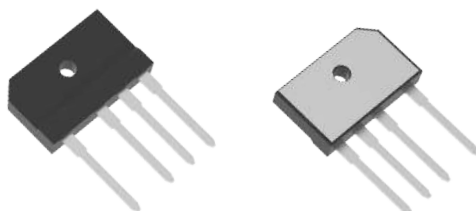
- Halogen Free. "Green" Device (Note 1)
- High Current Capability
- Superior Thermal Conductivity
- Lead Free Finish/RoHS Compliant (Note 2) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating

**Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance<sup>(Note2)</sup>: 0.8°C/W Junction to Case
- Typical Thermal Resistance: 18°C/W Junction to Ambient

**Mechanical Data**

- Mounting Torque: 5in-lbs



MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
PB25005	PB25005	50V	35V	50V
PB2501	PB2501	100V	70V	100V
PB2502	PB2502	200V	140V	200V
PB2504	PB2504	400V	280V	400V
PB2506	PB2506	600V	420V	600V
PB2508	PB2508	800V	560V	800V
PB2510	PB2510	1000V	700V	1000V

**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Forward Current	$I_{F(AV)}$	25A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	350A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	1.0V 0.9V	$I_{FM} = 12.5A; T_J = 25^\circ\text{C}$ $I_{FM} = 12.5A; T_J = 125^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5μA 250μA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Dielectric Strength	$V_{dis}$	2.5KV	Terminals to Case, AC 1 Minute
Rating for Fusing	$I^2t$	508 A <sup>2</sup> s	1ms<t<8.3ms

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

2. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

3. Unit Mounted on 100\*50\*2mm Aluminum Plate Heatsink.

**25 Amp  
Bridge Rectifier  
50 - 1000 Volts**

**PB**

**DIMENSIONS**

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.169	1.193	29.70	30.30	
B	0.776	0.799	19.70	20.30	
C	0.669	0.709	17.00	18.00	
D	0.189	0.228	4.80	5.80	
E	0.150	0.165	3.80	4.20	
F	0.287	0.303	7.30	7.70	
G	0.386	0.402	9.80	10.20	
H	0.035	0.043	0.90	1.10	
I	0.079	0.094	2.00	2.40	
J	0.091	0.106	2.30	2.70	
K	0.134	0.150	3.40	3.80	
L	0.173	0.189	4.40	4.80	
M	0.425	0.441	10.80	11.20	
N	0.122	0.146	3.10	3.70	
O	0.122	0.134	3.10	3.40	
P	0.024	0.031	0.60	0.80	
A1	1.136	1.144	28.85	29.05	
B1	0.742	0.750	18.85	19.05	
C1	0.016	0.024	0.40	0.60	
D1	0.016	0.024	0.40	0.60	

**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

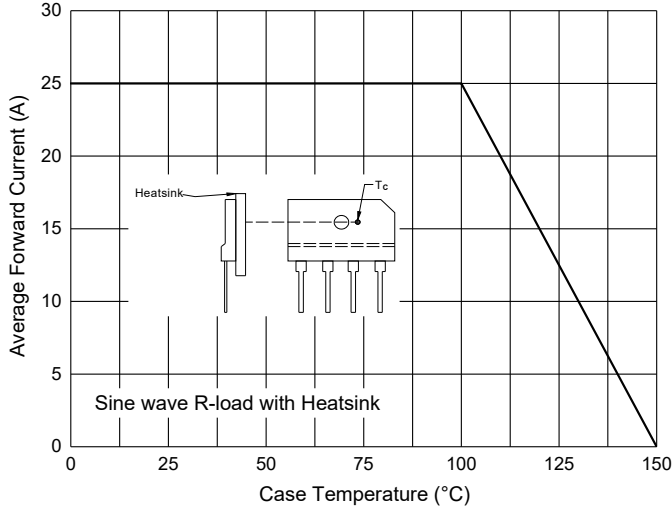


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

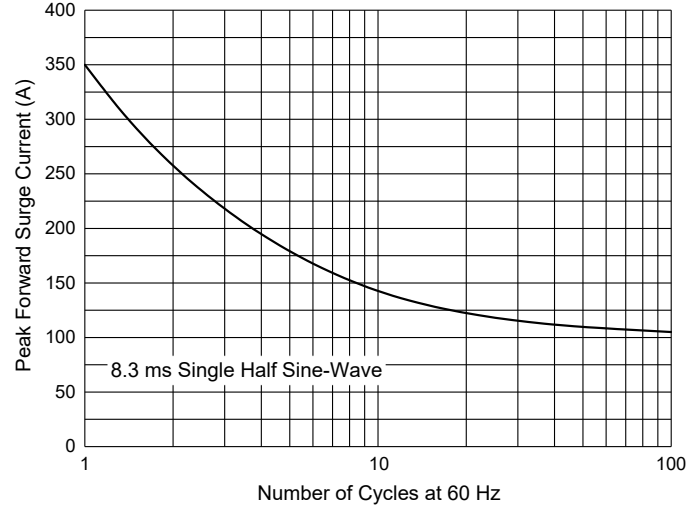


Fig. 2 - Typical Instantaneous Forward Characteristics

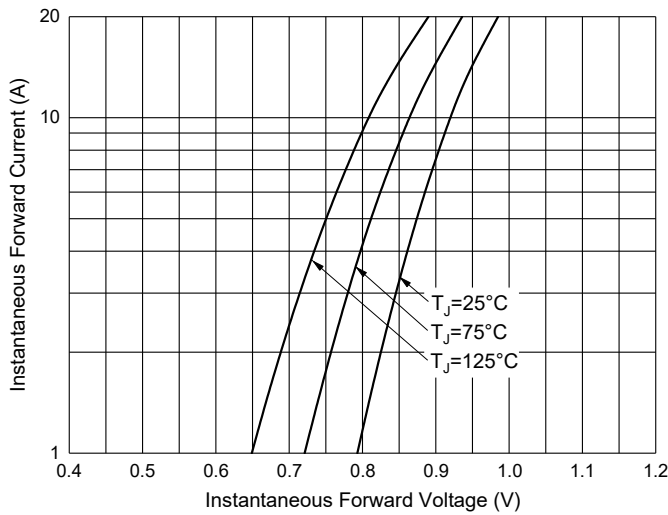
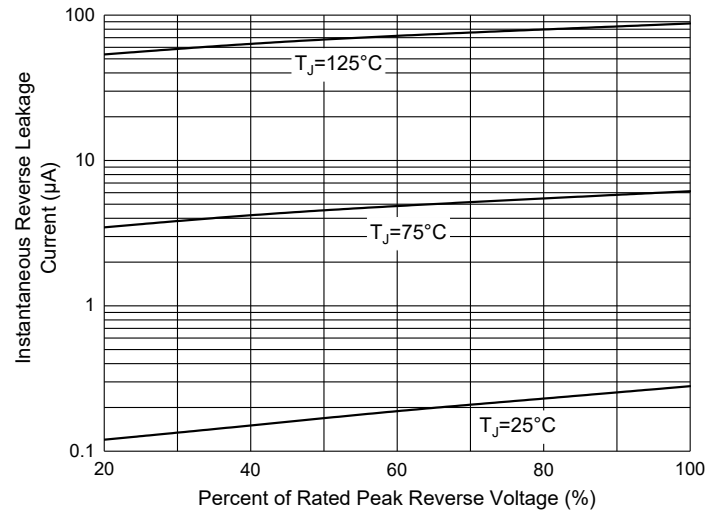


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

Device	Packing
Part Number-BP	Tube:15pcs/Tube, 750pcs/Box, 1500pcs/Ctn;

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