

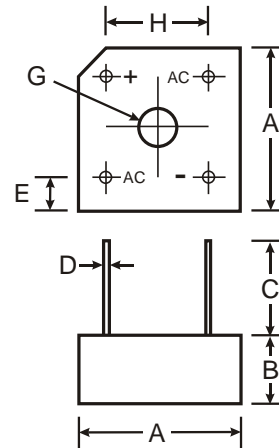
### Features

- Ideal for Printed Circuit Board
- Surge Overload Rating of 125A Peak
- Low forward Voltage Drop
- The Plastic Material Carries U/L Recognition 94V-0
- **Lead Free Finish, RoHS Compliant (Date Code 0514+) (Note 1)**

**NOT RECOMMENDED FOR NEW DESIGNS -  
USE PBPC601-PBPC607**

### Mechanical Data

- Case: PB-6, Plastic
- Terminals: Leads Solderable per MIL-STD-202, Method 208
- Polarity: Symbols Marked on Body
- Weight: 4.56 grams



PB-6		
Dim	Min	Max
A	14.73	15.75
B	5.84	6.86
C	19	—
D	1.0 Typical	
E	1.7	2.7
G	3.6 $\phi$	4.0 $\phi$
H	10.3	11.3
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics

Ratings at 25° C ambient temperature unless otherwise specified.  
Single phase, 60Hz, resistive or inductive load.

Characteristic	Symbol	PB605	PB61	PB62	PB64	PB66	PB68	PB610	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	$V_{RSM}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current @ $T_{HS}$ (Heatsink Temp) = 50°C	$I_{(AV)}$	6.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	125							A
Maximum Forward Voltage Drop per element at 3.0A <sub>dc</sub>	$V_F$	1.1							V
Maximum dc Reverse Current at rated dc Blocking Voltage per element @ $T_A = 25^\circ\text{C}$ @ $T_A = 100^\circ\text{C}$	$I_R$	10 1							$\mu\text{A}$ mA
Typical Thermal Resistance	$R_{JC}$	8							°C/W
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to +150							°C

Notes: 1. EC Directive 2002/95/EC (RoHS) revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied where applicable, see *EU Directive Annex Notes 5 and 7.*

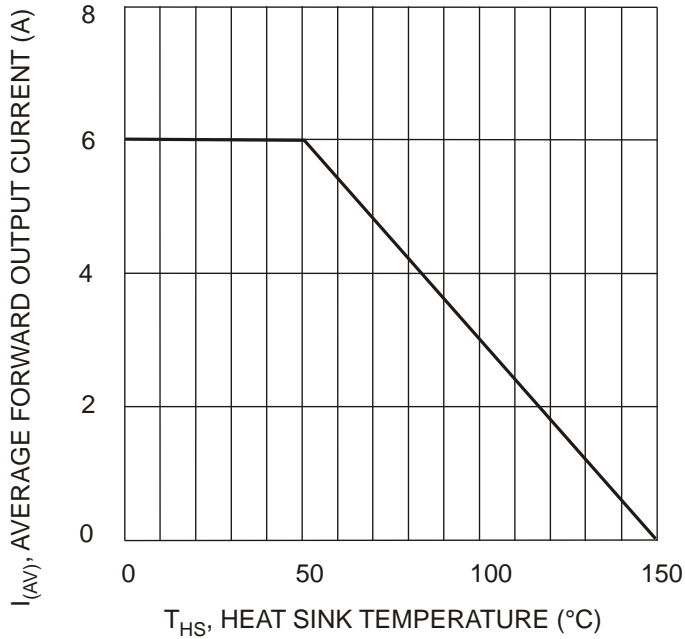


Fig. 1, Derating Curve for Output Rectified Current

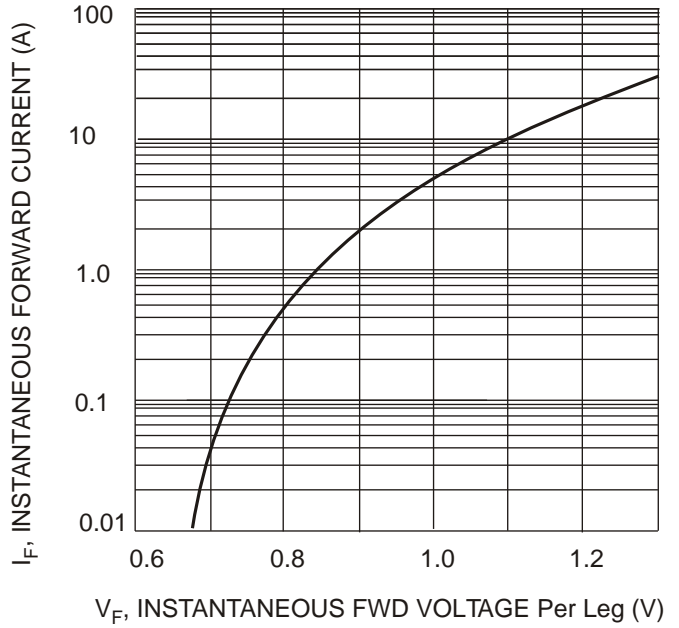


Fig. 2, Typical Forward Characteristics

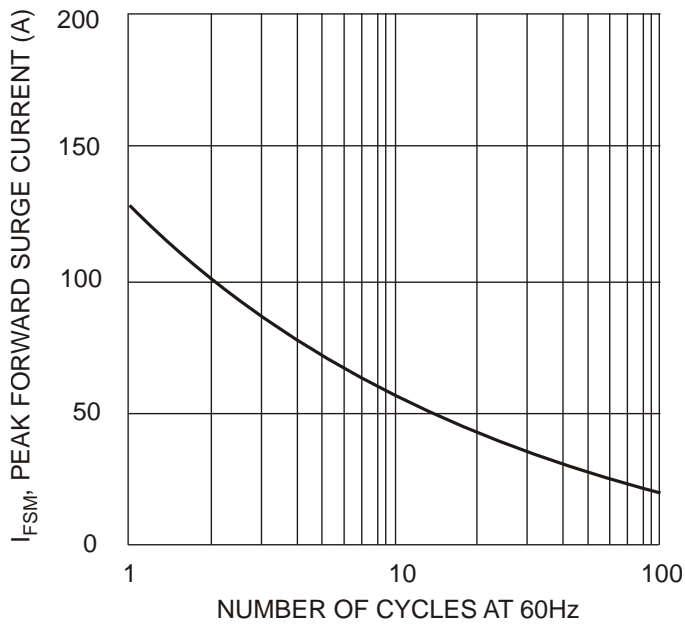


Fig. 3, Maximum Forward Surge Current

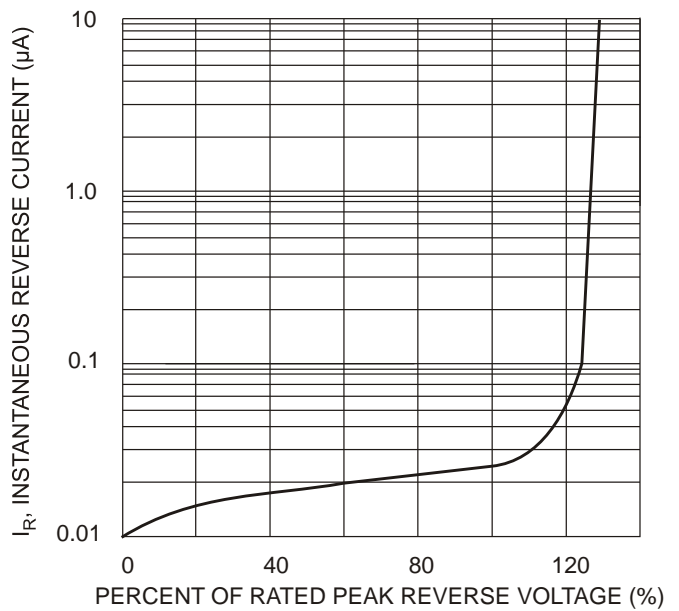


Fig. 4, Typical Reverse Characteristics

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**Ordering Information** (Note 2)

Device	Packaging	Shipping
PB605	PB-6	200 Bulk
PB61	PB-6	200 Bulk
PB62	PB-6	200 Bulk
PB64	PB-6	200 Bulk
PB66	PB-6	200 Bulk
PB68	PB-6	200 Bulk
PB610	PB-6	200 Bulk

Notes: 2. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.

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