



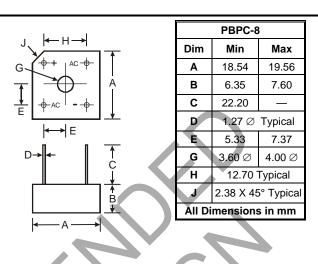
10A BRIDGE RECTIFIER

Features

- High Current Capability
- Surge Overload Rating to 150A Peak
- High Case Dielectric Strength of 1500V
- Ideal for Printed Circuit Board Application
- UL Listed Under Recognized Component Index, File
 Number E94661

Mechanical Data

- Case: PBPC-8
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Marked on Body
- Mounting: Through Hole for #6 Screw
- Mounting Torque: 5.0 Inch-pounds Maximum
- Ordering Information: See Page 2
- Marking: Type Number
- Weight: 3.8 grams (approximate)



Maximum Ratings and Electrical Characteristics @T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	PBPC 1001	PBPC 1002	PBPC 1003	PBPC 1004	PBPC 1005	PBPC 1006	PBPC 1007	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} VR	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current(Note 1)@ $T_C = 50^{\circ}C$ (Note 2)@ $T_C = 50^{\circ}C$	lo				10 8.0				А
Non-Repetitive Peak Forward Surge Current 8 3ms Single Half Sine-Wave Superimposed on Rated Load	IFSM				150				А
Forward Voltage (per element) @ IF = 5.0A	VFM				1.1				V
Peak Reverse Current @ Tc = 25°C at Rated DC Blocking Voltage (per element) @ Tc = 100°C					10 1.0				μA mA
I ² t Rating for Fusing (t<8.3ms) (Note 3)	l ² t				64				A²s
Typical Total Capacitance, per element (Note 4)	CT	110				pF			
Typical Thermal Resistance Junction to Case (per element)	$R_{ extsf{ heta}JC}$				7.5				°C/W
Operating and Storage Temperature Range	T _{j,} T _{STG}			-6	65 to +12	25			°C

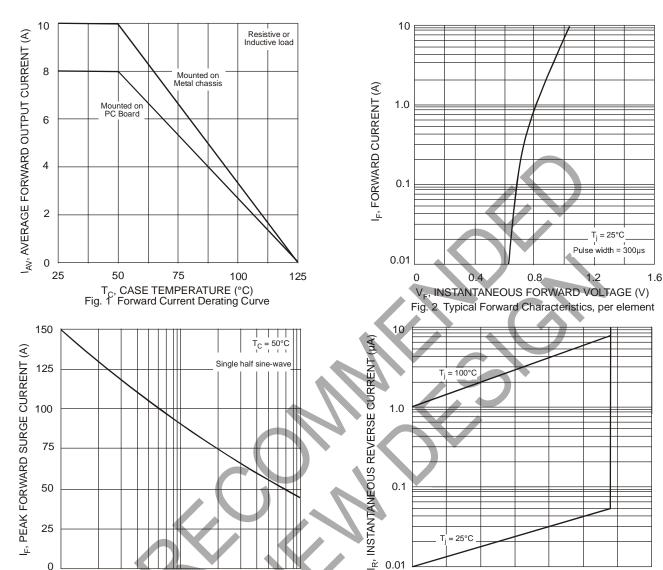
Notes: 1. Mounted on metal chassis.

2. Mounted on PC board FR-4 material.

3. Non-repetitive, for t > 1.0ms and < 8.3ms.

4. Per element, measured at 1.0 MHz and applied reverse voltage of 4.0V DC.





NOT RECOMMENDED FOR NEW DESIGN

Ordering Information (Note 5)

10

NUMBER OF CYCLES AT 60Hz Fig. 3 Typical Reverse Characteristics

0

1.0

Device	Packaging	Shipping
PBPC1001	PBPC-8	150/Box
PBPC1002	PBPC-8	150/Box
PBPC1003	PBPC-8	150/Box
PBPC1004	PBPC-8	150/Box
PBPC1005	PBPC-8	150/Box
PBPC1006	PBPC-8	150/Box
PBPC1007	PBPC-8	150/Box

100

= 25°C

40

80

PERCENT OF RATED PEAK REVERSE VOLTAGE (%) Fig. 4 Typical Reverse Characteristics, per element

120

0.01

0

Notes: 5. For packaging details, go to our website at http://www.diodes.com/datasheets/ap02008.pdf.



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