

# 10A SINGLE-PHASE BRIDGE RECTIFIER

#### **Features**

- **Diffused Junction**
- **High Current Capability**
- High Case Dielectric Strength
- High Surge Current Capability
- Ideal for Printed Circuit Board Application
- Plastic Material has UL Flammability 94V-0
- Recognized File # E157705

#### **Mechanical Data**

Case: KBPC-8, Molded Plastic

Terminals: Plated Leads Solderable per MIL-STD-202, Method 208

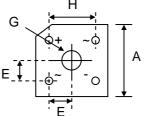
Polarity: Marked on Body Weight: 5.4 grams (approx.)

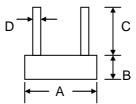
Mounting Position: Through Hole for #6 Screw

Mounting Torque: 10 cm-kg (8.8 in-lbs) Max.

Marking: Type Number

Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4





KBPC-8				
Dim	Min Max			
Α	18.54	19.56		
В	6.35	7.60		
С	19.00	1		
D	1.27 Ø Typical			
Е	5.33 7.37			
G	Hole for	Hole for #6 screw		
G	3.60	4.00		
Н	12.20	13.80		
All Dimensions in mm				

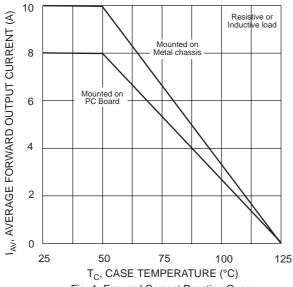
#### Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

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

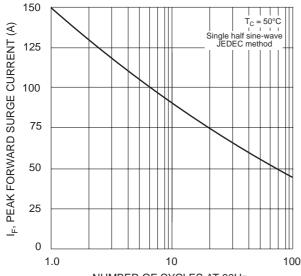
Characteristic		Symbol	PB 1000	PB 1001	PB 1002	PB 1004	PB 1006	PB 1006	PB 1010	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		Vrrm Vrwm Vr	50	100	200	400	600	800	1000	V
RMS Reverse Voltage		VR(RMS)	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @T <sub>C</sub> = 50°C		lo	10				Α			
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	150					А		
Forward Voltage per leg	$@I_F = 5.0A$	VFM				1.1				V
Peak Reverse Current At Rated DC Blocking Voltage	@T <sub>A</sub> = 25°C @T <sub>A</sub> = 125°C	lr				5.0 500				μΑ
I <sup>2</sup> t Rating for Fusing (t<8.3ms) (Note 2	)	l <sup>2</sup> t				127				A <sup>2</sup> s
Typical Junction Capacitance (Note 3)		Cj	110					pF		
Typical Thermal Resistance per leg (Note 1)		R ⊕ JC	6.0					°C/W		
Operating and Storage Temperature Range		Тj, Tsтg	-65 to +125					°C		

Note: 1. Mounted on metal chassis.

- 2. Non-repetitive, for t > 1ms and < 8.3ms.
- 3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.







NUMBER OF CYCLES AT 60Hz Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

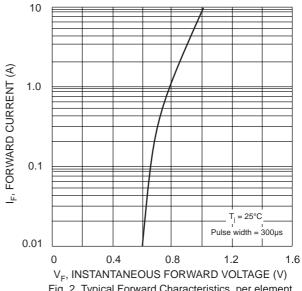
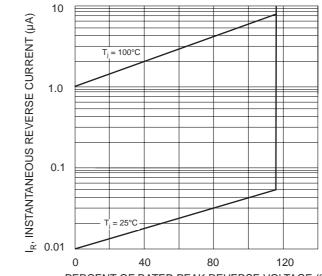
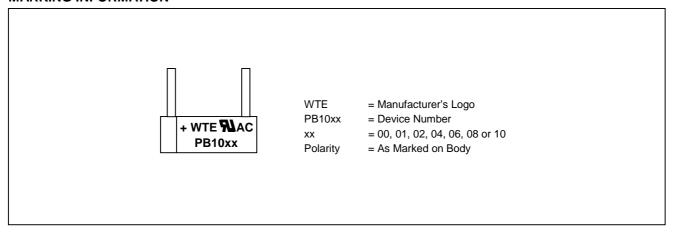


Fig. 2 Typical Forward Characteristics, per element



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

### **MARKING INFORMATION**



## **PACKAGING INFORMATION**

#### **BULK**

Inner Box Size	Quantity	Carton Size	Quantity	Approx. Gross Weight (KG)
L x W x H (mm)	(PCS)	L x W x H (mm)	(PCS)	
237 x 240 x 52	200	500 x 255 x 275	2,000	14.0

Note: 1. Paper box, white or brown color.

#### **ORDERING INFORMATION**

Product No.	Package Type	Shipping Quantity
PB1000	Square Bridge	200 Units/Box
PB1001	Square Bridge	200 Units/Box
PB1002	Square Bridge	200 Units/Box
PB1004	Square Bridge	200 Units/Box
PB1006	Square Bridge	200 Units/Box
PB1008	Square Bridge	200 Units/Box
PB1010	Square Bridge	200 Units/Box

- Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
- To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, PB1000-LF.

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**WARNING**: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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