


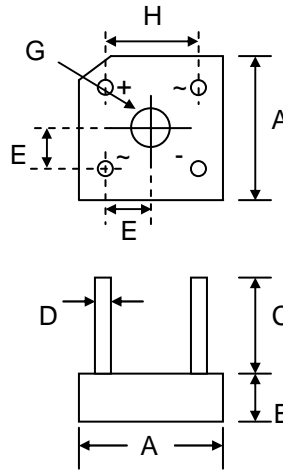
## 8.0A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

### Features

- Glass Passivated Die Construction
- 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
A	18.54	19.56
B	6.35	7.60
C	19.00	—
D	1.27 Ø Typical	
E	5.33	7.37
G	Hole for #6 screw	
	3.60	4.00
H	12.20	13.80
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

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

Characteristic	Symbol	KBPC 800G	KBPC 801G	KBPC 802G	KBPC 804G	KBPC 806G	KBPC 808G	KBPC 810G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @T <sub>A</sub> = 50°C	I <sub>O</sub>	8.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	160							A
Forward Voltage per leg @I <sub>F</sub> = 4.0A	V <sub>FM</sub>	1.0							V
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 125°C	I <sub>R</sub>	5.0 500							μA
I <sup>2</sup> t Rating for Fusing (t<8.3ms) (Note 2)	I <sup>2</sup> <sub>t</sub>	160							A <sup>2</sup> s
Typical Junction Capacitance (Note 3)	C <sub>j</sub>	200							pF
Typical Thermal Resistance per leg (Note 1)	R <sub>θJC</sub>	6.0							°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150							°C

Note: 1. Mounted on 200 x 200 x 6.0mm Al. plate.  
2. Non-repetitive, for t > 1ms and < 8.3ms.  
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

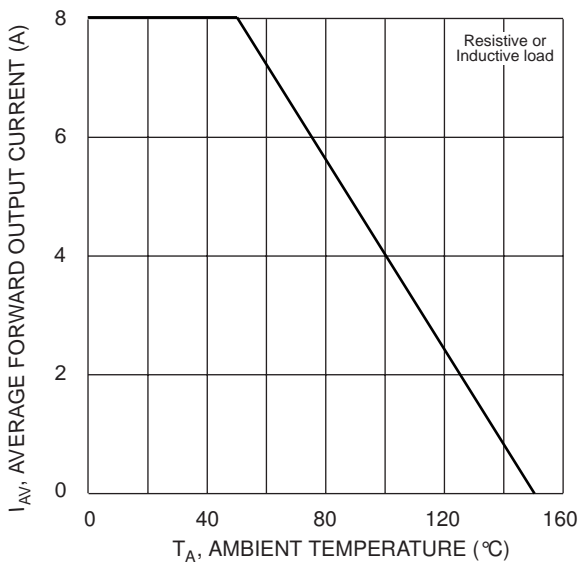


Fig. 1 Forward Current Derating Curve

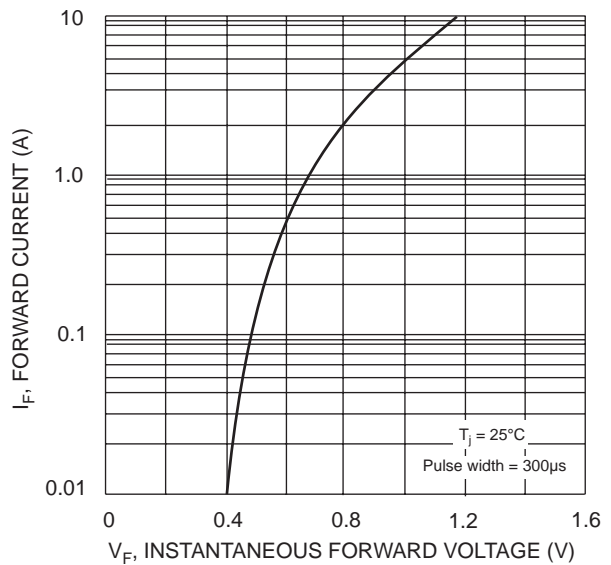


Fig. 2 Typical Forward Characteristics, per element

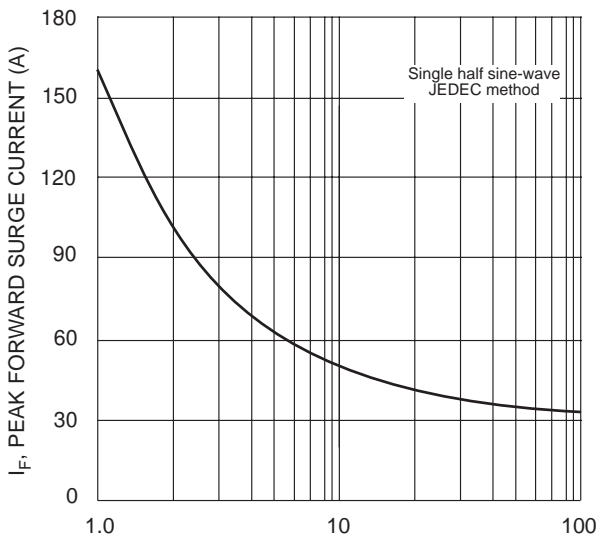


Fig. 3 Forward Surge Current

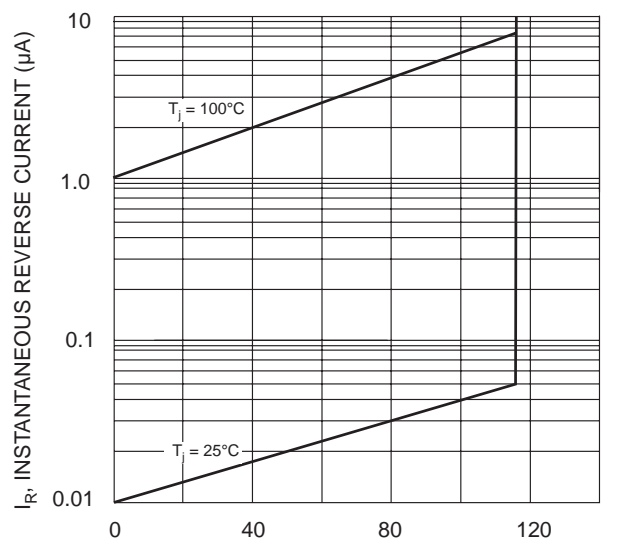
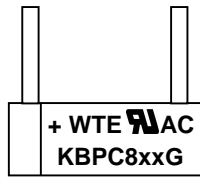


Fig. 4 Typical Reverse Characteristics, per element

## MARKING INFORMATION



WTE = Manufacturer's Logo  
KBPC8xxG = Device Number  
xx = 00, 01, 02, 04, 06, 08 or 10  
Polarity = As Marked on Body

## PACKAGING INFORMATION

### BULK

Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
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
KBPC800G	Square Bridge	200 Units/Box
KBPC801G	Square Bridge	200 Units/Box
KBPC802G	Square Bridge	200 Units/Box
KBPC804G	Square Bridge	200 Units/Box
KBPC806G	Square Bridge	200 Units/Box
KBPC808G	Square Bridge	200 Units/Box
KBPC810G	Square Bridge	200 Units/Box

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, KBPC800G-LF.**

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**Won-Top Electronics Co., Ltd.**

No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung, Taiwan

**Phone:** 886-7-822-5408 or 886-7-822-5410

**Fax:** 886-7-822-5417

**Email:** sales@wontop.com

**Internet:** <http://www.wontop.com>

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