
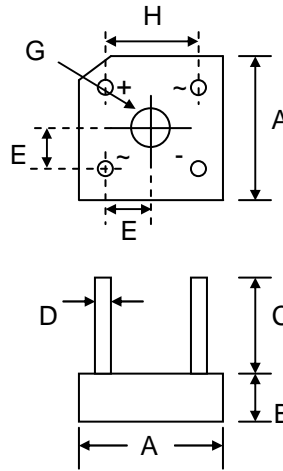


## 8.0A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

### 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



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		

### 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**

### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ 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	$V_{RRM}$ $V_{RWM}$ $V_R$	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) @ $T_A = 50^\circ\text{C}$	$I_O$	8.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	160							A
Forward Voltage per leg @ $I_F = 4.0\text{A}$	$V_{FM}$	1.0							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	$I_R$	5.0 500							$\mu\text{A}$
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ ) (Note 2)	$I^2t$	160							$\text{A}^2\text{s}$
Typical Junction Capacitance (Note 3)	$C_j$	200							pF
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JC}$	6.0							$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150							$^\circ\text{C}$

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

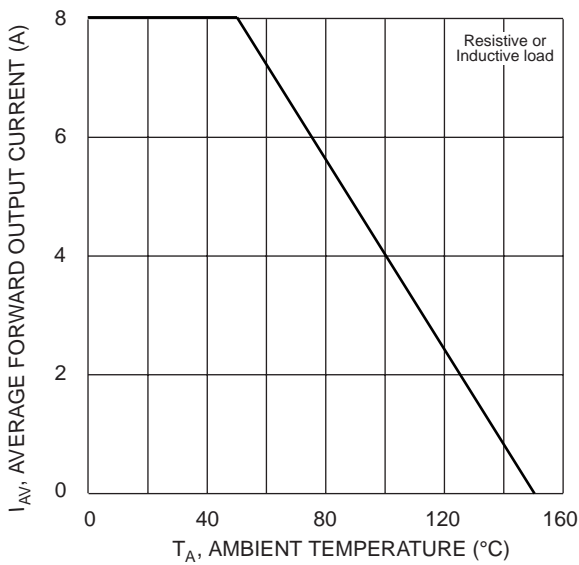


Fig. 1 Forward Current Derating Curve

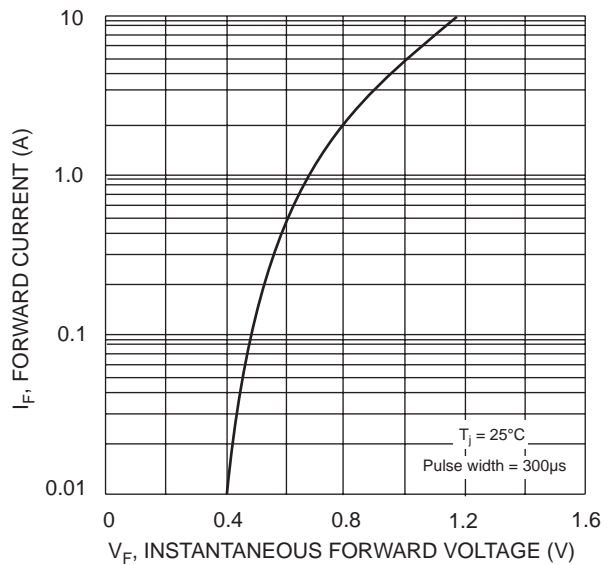


Fig. 2 Typical Forward Characteristics, per element

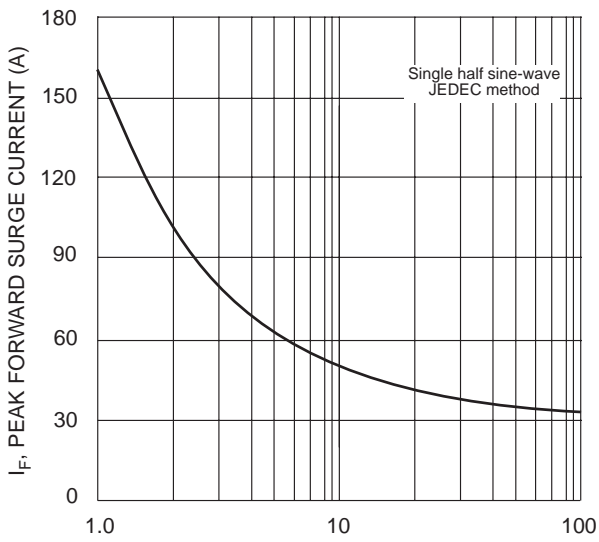


Fig. 3 Forward Surge Current

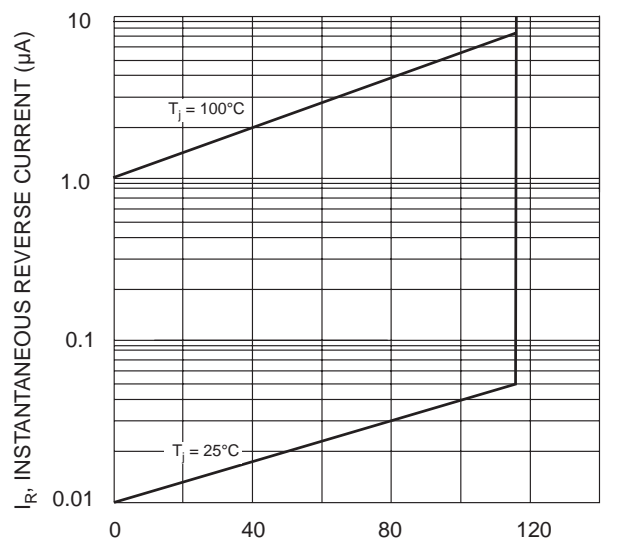
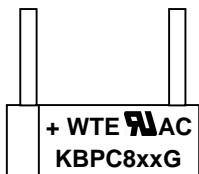


Fig. 4 Typical Reverse Characteristics, per element

## 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.**

Won-Top Electronics Co., Ltd (WTE) has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

**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.

**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>

*We power your everyday.*