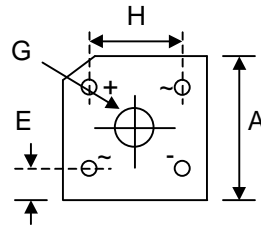


## 3.0A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

### Features

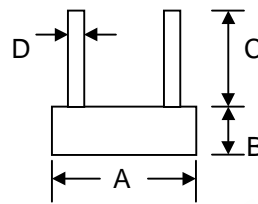
- Glass Passivated Die Construction
- High Current Capability
- High Case Dielectric Strength
- High Surge Current Capability
- Ideal for Printed Circuit Board Application
- Plastic Material has UL Flammability 94V-0
-  Recognized File # E157705



KBPC-3		
Dim	Min	Max
A	14.73	15.75
B	5.84	6.86
C	19.00	—
D	0.76 Ø Typical	
E	1.70	2.72
G	Hole for #6 screw	
	3.60	4.00
H	10.30	11.30
All Dimensions in mm		

### Mechanical Data

- Case: KBPC-3, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Marked on Body
- Weight: 3.8 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 300G	KBPC 301G	KBPC 302G	KBPC 304G	KBPC 306G	KBPC 308G	KBPC 310G	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) @ $T_A = 50^\circ\text{C}$	$I_O$	3.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	60							A
Forward Voltage per leg @ $I_F = 1.5\text{A}$	$V_{FM}$	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)	$I^2t$	15							$\text{A}^2\text{s}$
Typical Junction Capacitance (Note 3)	$C_j$	21							pF
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JC}$	8.0							$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150							$^\circ\text{C}$

Note: 1. Mounted on 105 x 105 x 3.0mm 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.

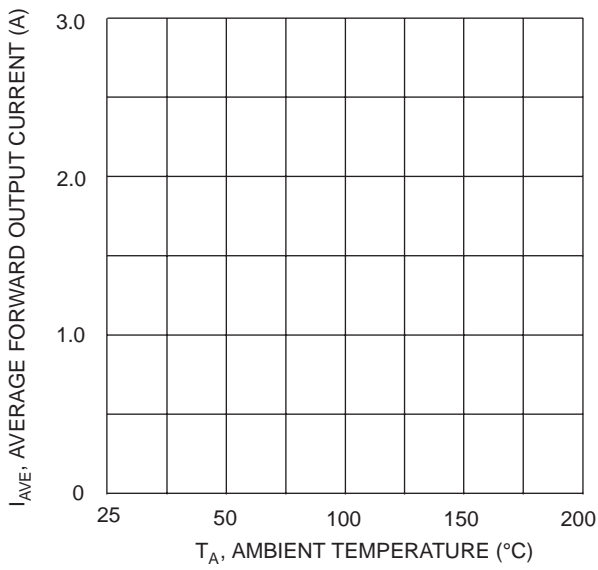


Fig. 1 Forward Current Derating Curve

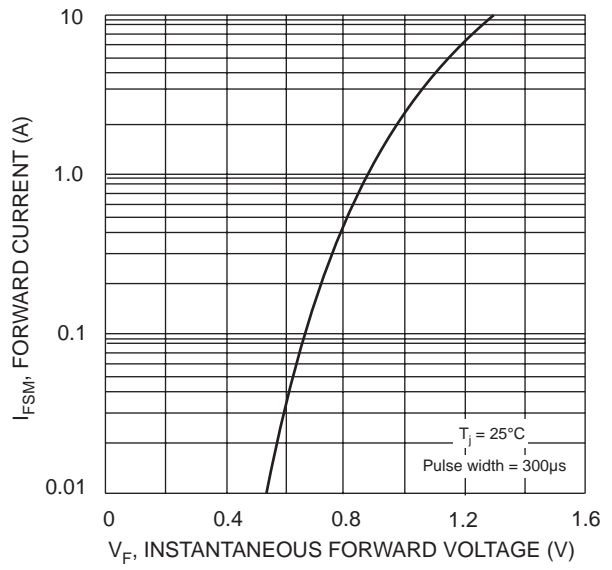


Fig. 2 Typical Forward Characteristics, per element

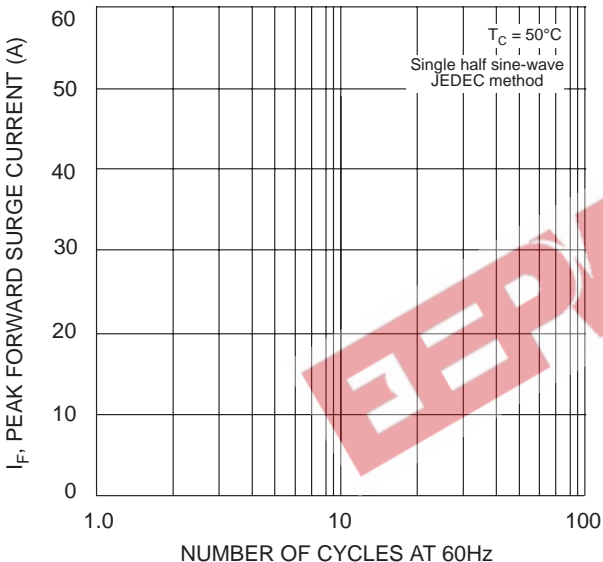


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

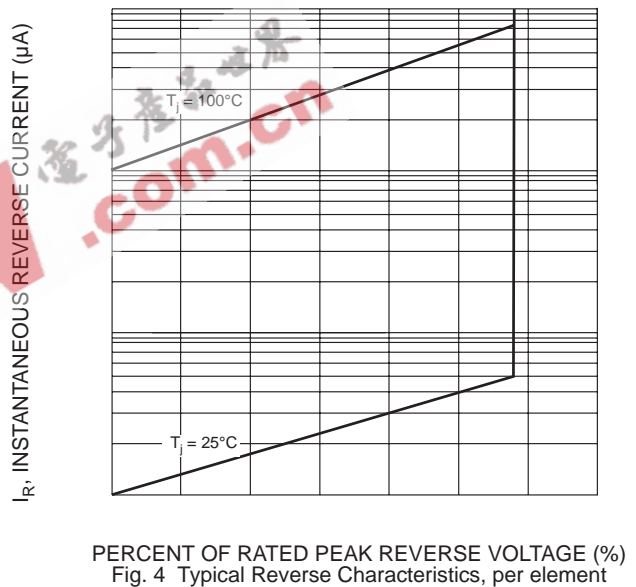
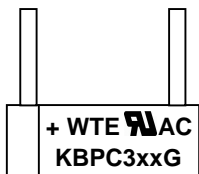


Fig. 4 Typical Reverse Characteristics, per element

## MARKING INFORMATION



WTE = Manufacturer's Logo  
 KBPC3xxG = 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)
198 x 198 x 50	200	425 x 215 x 280	2,000	8.0

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

EEPW.com.cn 电子元件世界

## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
KBPC300G	Square Bridge	200 Units/Box
KBPC301G	Square Bridge	200 Units/Box
KBPC302G	Square Bridge	200 Units/Box
KBPC304G	Square Bridge	200 Units/Box
KBPC306G	Square Bridge	200 Units/Box
KBPC308G	Square Bridge	200 Units/Box
KBPC310G	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, KBPC300G-LF.**

EEPW 电子產品世界  
.com.cn

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.*