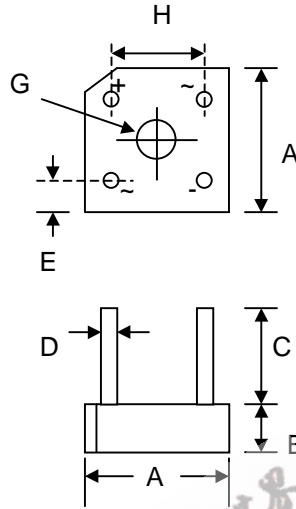


# KBPC300G – KBPC310G

## 3.0A GLASS PASSIVATED 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 Underwriters Laboratory Flammability Classification 94V-O



KBPC-3		
Dim	Min	Max
A	14.73	15.75
B	5.84	6.86
C	19.00	—
D	0.70 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: 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: 5.0 Inch-pounds Maximum
- Marking: Type Number

### 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 300G	KBPC 301G	KBPC 302G	KBPC 304G	KBPC 306G	KBPC 308G	KBPC 310G	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>								V
Working Peak Reverse Voltage	V <sub>RWM</sub>	50	100	200	400	600	800	1000	
DC Blocking Voltage	V <sub>R</sub>								
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>	3.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	60							A
Forward Voltage (per element) @I <sub>F</sub> = 1.5A	V <sub>FM</sub>	1.0							V
Peak Reverse Current @T <sub>C</sub> = 25°C At Rated DC Blocking Voltage @T <sub>C</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>	15							A <sup>2</sup> s
Typical Junction Capacitance (Note 3)	C <sub>j</sub>	21							pF
Typical Thermal Resistance (Note 4)	R <sub>θJC</sub>	8.0							K/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-55 to +150							°C

- Note: 1. Mounted on 4.0" x 4.0" x 0.11" thick 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.  
 4. Thermal resistance junction to case per element.

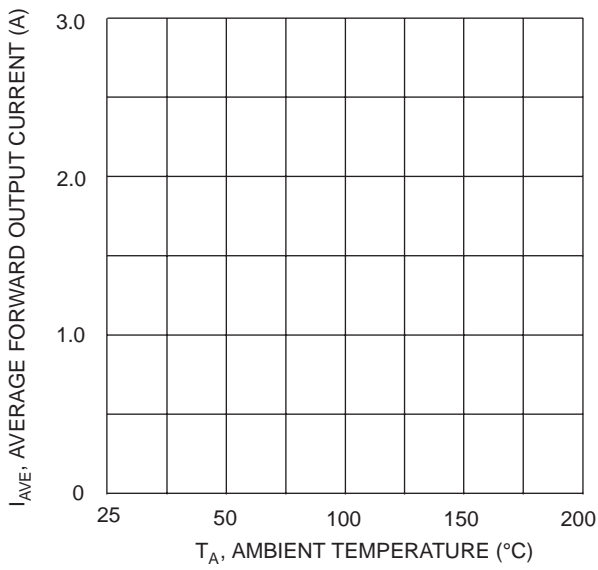


Fig. 1 Forward Current Derating Curve

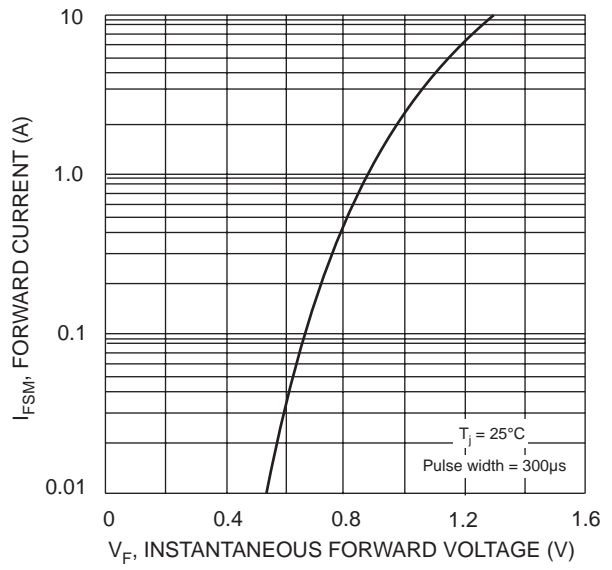


Fig. 2 Typical Forward Characteristics, per element

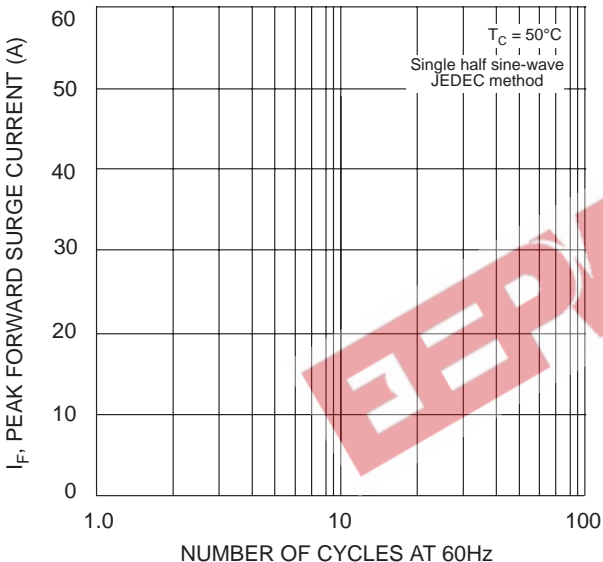


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

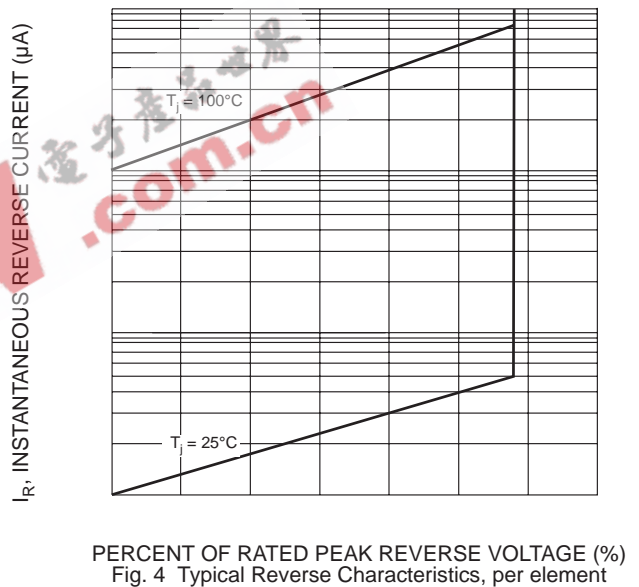


Fig. 4 Typical Reverse Characteristics, per element

## 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

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

**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.*