

### Features

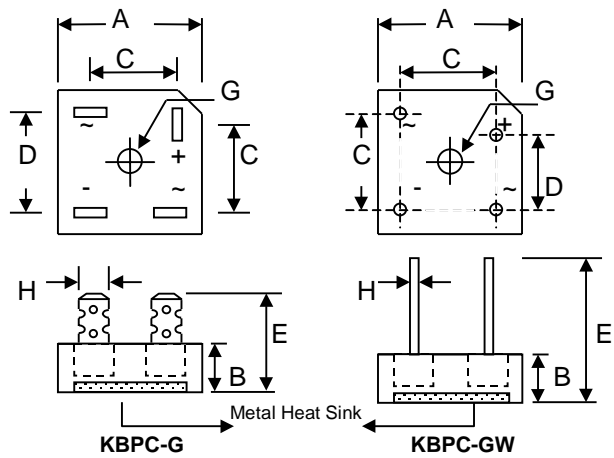
- Glass Passivated Die Construction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Electrically Isolated Epoxy Case for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 2500V

### Mechanical Data

- Case: Epoxy Case with Heat Sink Internally Mounted in the Bridge Encapsulation
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Symbols Marked on Case
- Mounting: Through Hole for #10 Screw
- Weight: KBPC-G 24 grams (approx.)  
KBPC-GW 21 grams (approx.)
- Marking: Type Number

"W" Suffix Designates Wire Leads  
No Suffix Designates Faston Terminals

\*All Models are Available on B(Height)=7.9mm Max. Epoxy Case



Dim	KBPC-G		KBPC-GW	
	Min	Max	Min	Max
A	28.40	28.70	28.40	28.70
B	10.97	11.23	10.97	11.23
C	15.70	16.70	17.10	19.10
D	17.50	18.50	10.90	11.90
E	22.86	25.40	30.50	—
G	Hole for #10 screw, 5.08Ø Nominal			
H	6.35 Typical		0.97Ø 1.07Ø	

All Dimension 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 1000G/W	KBPC 1001G/W	KBPC 1002G/W	KBPC 1004G/W	KBPC 1006G/W	KBPC 1008G/W	KBPC 1010G/W	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 @T <sub>A</sub> = 50°C	I <sub>O</sub>	10							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	200							A
Forward Voltage (per element) @I <sub>F</sub> = 5.0A	V <sub>FM</sub>	1.1							V
Peak Reverse Current @T <sub>C</sub> = 25°C At Rated DC Blocking Voltage @T <sub>C</sub> = 125°C	I <sub>RM</sub>	5.0 500							µA
Typical Junction Capacitance (Note 1)	C <sub>j</sub>	300							pF
Typical Thermal Resistance (Note 2)	R <sub>θJC</sub>	5.3							K/W
RMS Isolation Voltage from Case to Lead	V <sub>ISO</sub>	2500							V
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +150							°C

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
2. Thermal resistance junction to case per element mounted on heatsink.

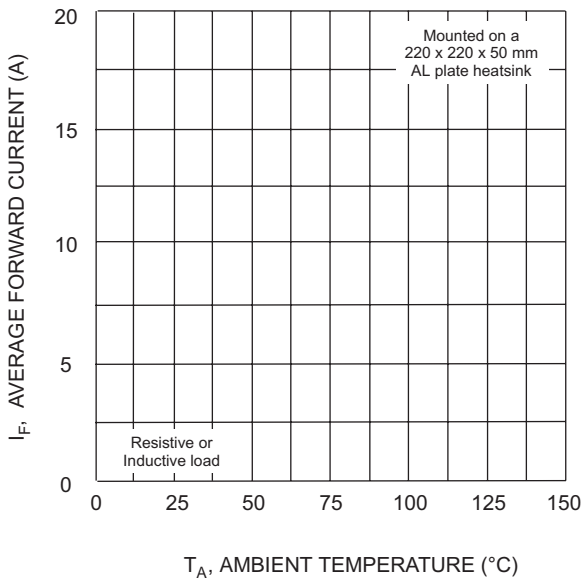


Fig. 1 Forward Current Derating Curve

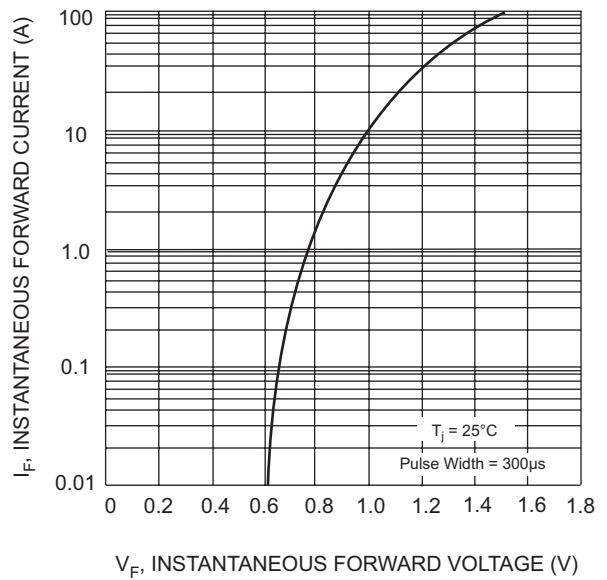


Fig. 2 Typical Forward Characteristics (per element)

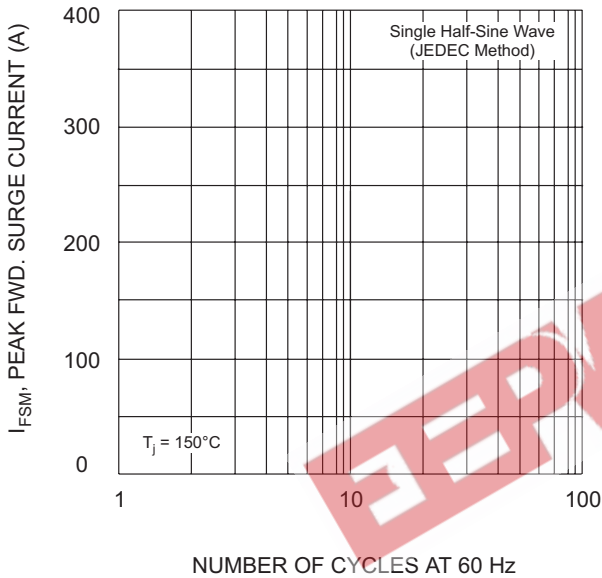


Fig. 3 Max Non-Repetitive Surge Current

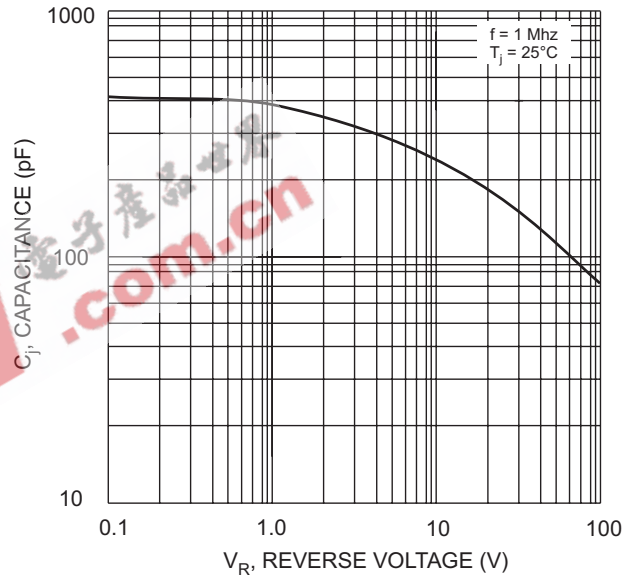


Fig. 4 Typical Junction Capacitance (per element)

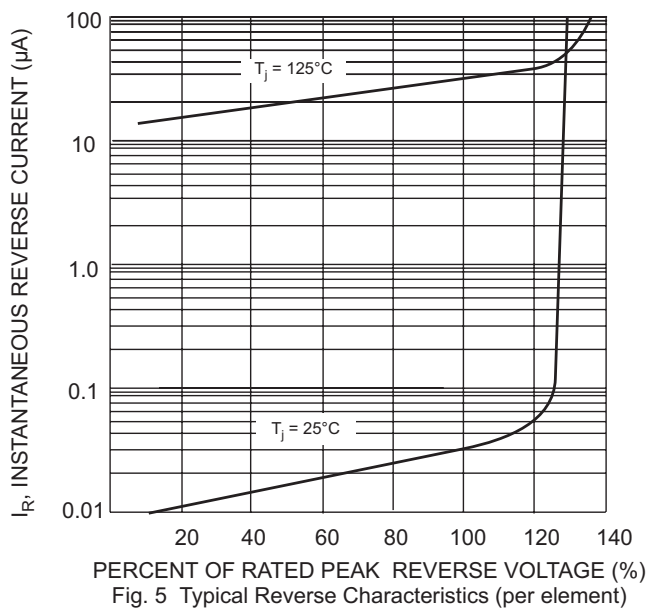


Fig. 5 Typical Reverse Characteristics (per element)

## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
KBPC1000G	Square Bridge	50 Units/Box
KBPC1000GW	Square Bridge	50 Units/Box
KBPC1001G	Square Bridge	50 Units/Box
KBPC1001GW	Square Bridge	50 Units/Box
KBPC1002G	Square Bridge	50 Units/Box
KBPC1002GW	Square Bridge	50 Units/Box
KBPC1004G	Square Bridge	50 Units/Box
KBPC1004GW	Square Bridge	50 Units/Box
KBPC1006G	Square Bridge	50 Units/Box
KBPC1006GW	Square Bridge	50 Units/Box
KBPC1008G	Square Bridge	50 Units/Box
KBPC1008GW	Square Bridge	50 Units/Box
KBPC1010G	Square Bridge	50 Units/Box
KBPC1010GW	Square Bridge	50 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.*