

KBPC1000P/W – KBPC1010P/W

10A HIGH CURRENT BRIDGE RECTIFIER

Features

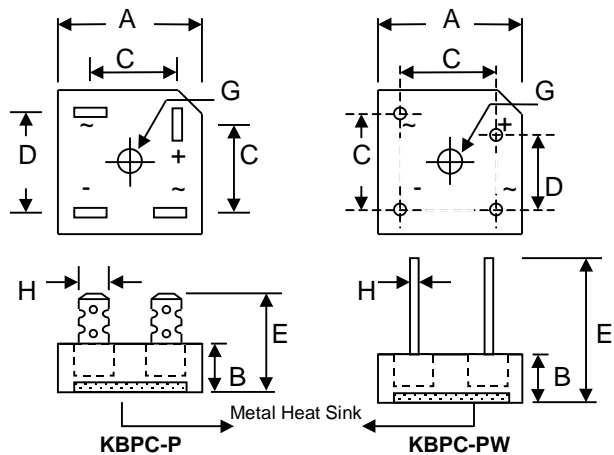
- Diffused Junction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Electrically Isolated Epoxy Case for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 2500V
- UL Recognized File # E157705

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-P 24 grams (approx.)
KBPC-PW 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



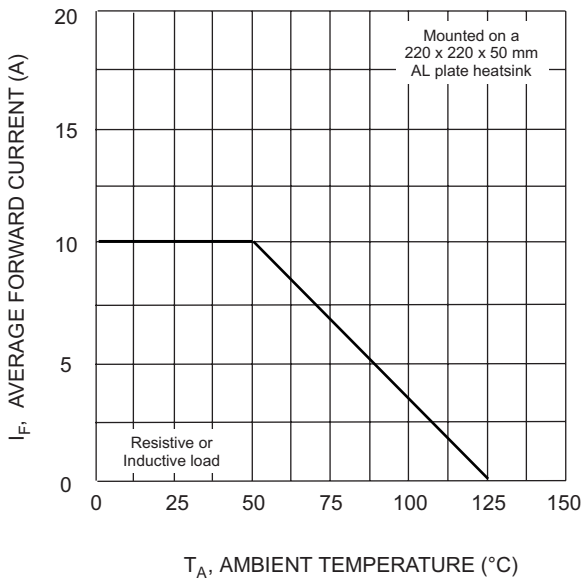
Dim	KBPC-P		KBPC-PW	
	Min	Max	Min	Max
A	28.40	28.70	28.40	28.70
B	10.97	11.23	10.97	11.23
C	15.70	16.70	17.10	19.10
D	17.50	18.50	10.90	11.90
E	22.86	25.40	30.50	—
G	Hole for #10 screw, 5.08Ø Nominal			
H	6.35 Typical		0.97Ø	1.07Ø
All Dimension in mm				

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

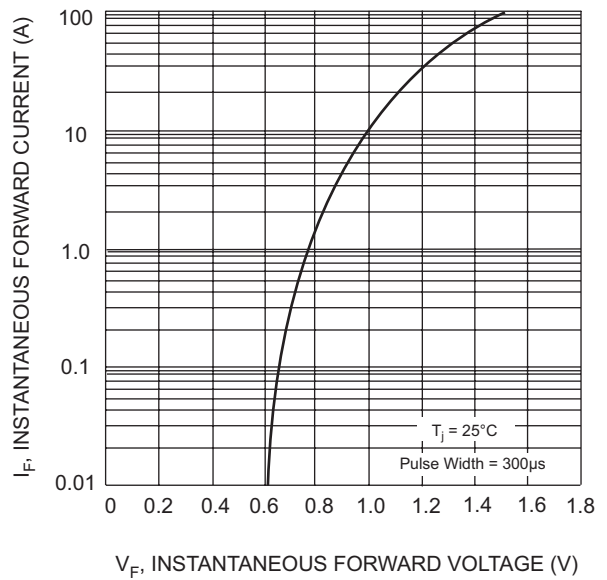
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	KBPC 1000P/W	KBPC 1001P/W	KBPC 1002P/W	KBPC 1004P/W	KBPC 1006P/W	KBPC 1008P/W	KBPC 1010P/W	Unit
Peak Repetitive Reverse Voltage	V _{RRM}								V
Working Peak Reverse Voltage	V _{RWM}	50	100	200	400	600	800	1000	
DC Blocking Voltage	V _R								
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current @T _A = 50°C	I _O	10							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	200							A
Forward Voltage (per element) @I _F = 5.0A	V _{FM}	1.1							V
Peak Reverse Current @T _C = 25°C At Rated DC Blocking Voltage @T _C = 125°C	I _{RM}	10 0.5							µA mA
Typical Junction Capacitance (Note 1)	C _j	200							pF
Typical Thermal Resistance (Note 2)	R _{θJC}	6.3							K/W
RMS Isolation Voltage from Case to Lead	V _{ISO}	2500							V
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +125							°C

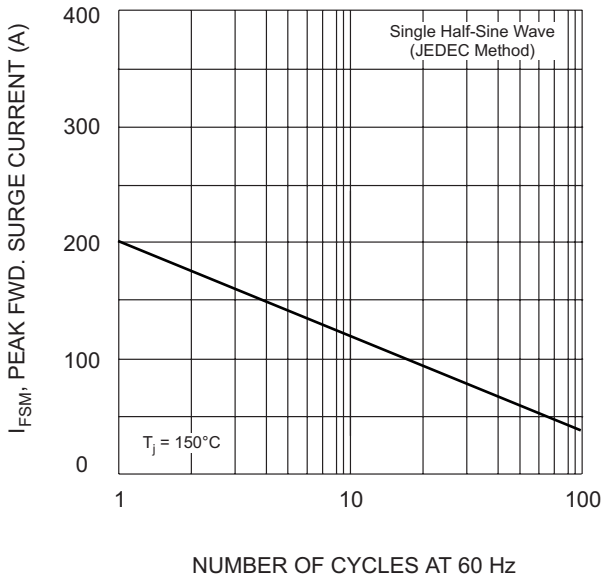
Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Thermal resistance junction to case per element mounted on heatsink.



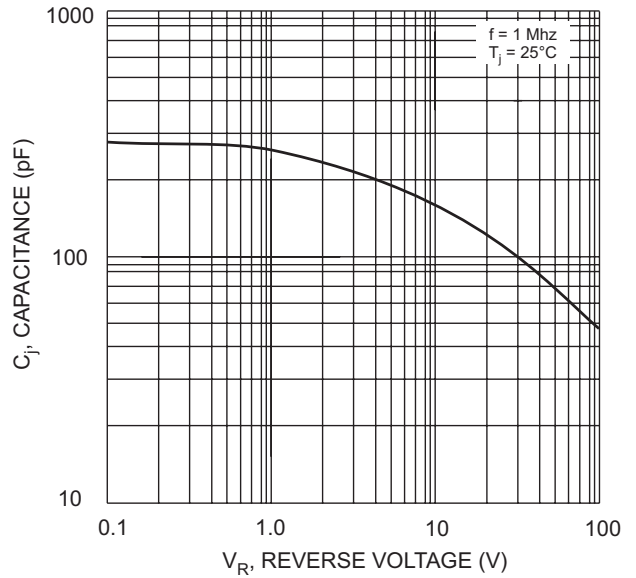
T_A , AMBIENT TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve



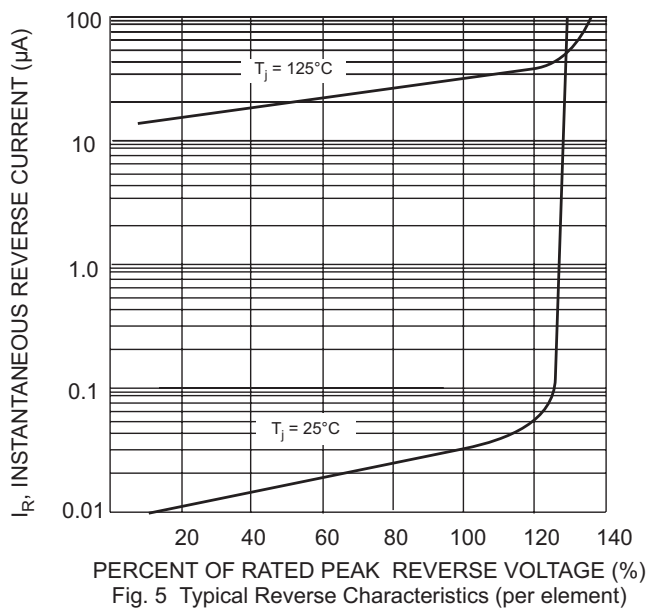
V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics (per element)



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Max Non-Repetitive Surge Current



V_R , REVERSE VOLTAGE (V)
Fig. 4 Typical Junction Capacitance (per element)



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
Fig. 5 Typical Reverse Characteristics (per element)

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
KBPC1000P	Square Bridge	50 Units/Box
KBPC1000PW	Square Bridge	50 Units/Box
KBPC1001P	Square Bridge	50 Units/Box
KBPC1001PW	Square Bridge	50 Units/Box
KBPC1002P	Square Bridge	50 Units/Box
KBPC1002PW	Square Bridge	50 Units/Box
KBPC1004P	Square Bridge	50 Units/Box
KBPC1004PW	Square Bridge	50 Units/Box
KBPC1006P	Square Bridge	50 Units/Box
KBPC1006PW	Square Bridge	50 Units/Box
KBPC1008P	Square Bridge	50 Units/Box
KBPC1008PW	Square Bridge	50 Units/Box
KBPC1010P	Square Bridge	50 Units/Box
KBPC1010PW	Square Bridge	50 Units/Box

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

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.