

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

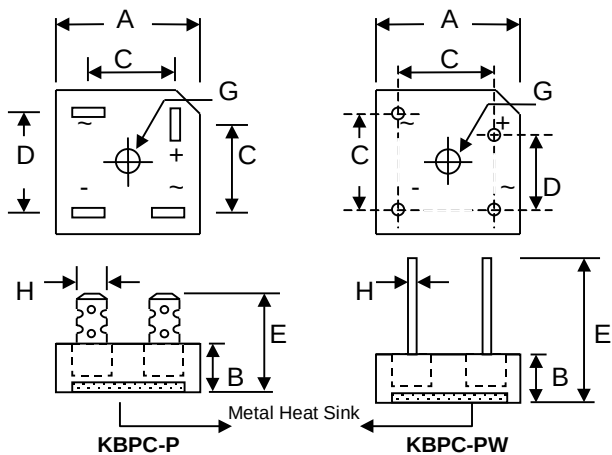
Mechanical Data

- 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



	KBPC-P		KBPC-PW	
Dim	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}								
Working Peak Reverse Voltage	V _{RWM}	50	100	200	400	600	800	1000	V
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	I _{RM}	10							µA
At Rated DC Blocking Voltage @T _C = 125°C		0.5							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.

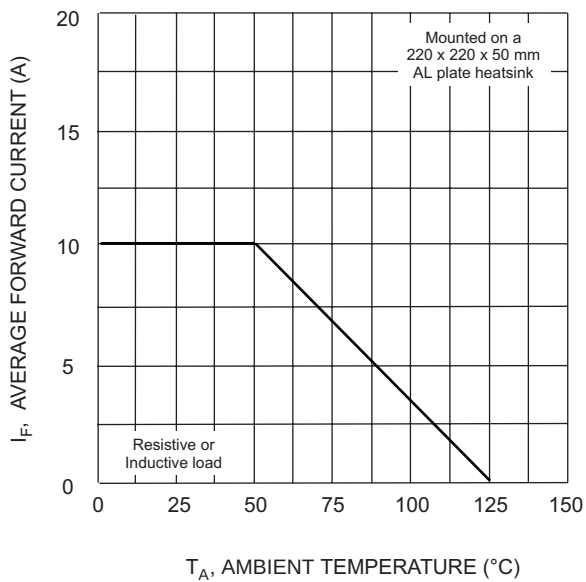


Fig. 1 Forward Current Derating Curve

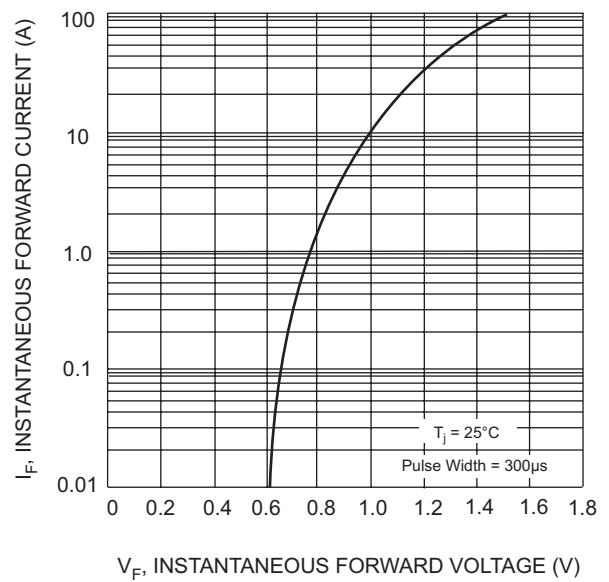


Fig. 2 Typical Forward Characteristics (per element)

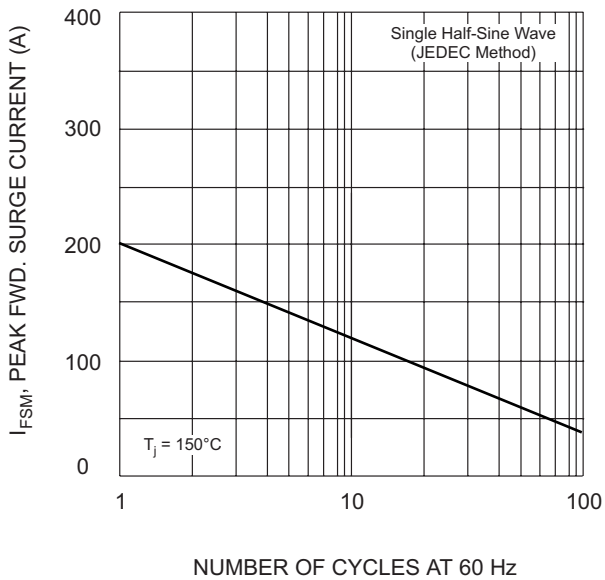


Fig. 3 Max Non-Repetitive Surge Current

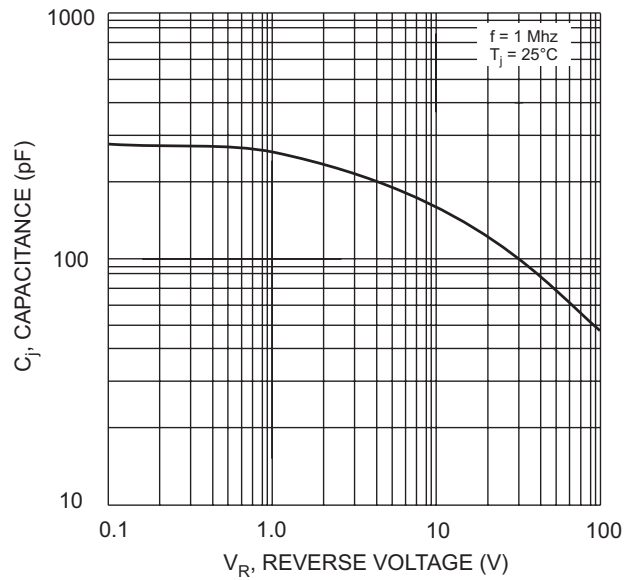


Fig. 4 Typical Junction Capacitance (per element)

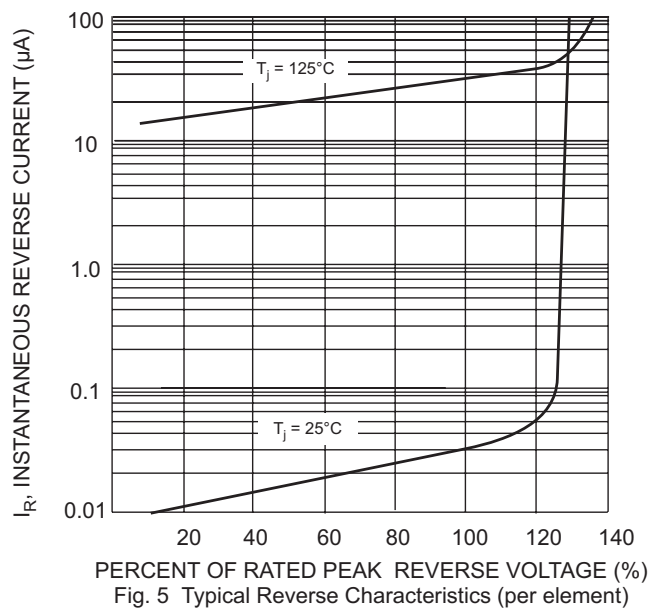


Fig. 5 Typical Reverse Characteristics (per element)

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
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.

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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.

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