SEMICONDUCTOR

10A HIGH CURRENT BRIDGE RECTIFIER

Data Sheet 1421, Rev.A

Green Products

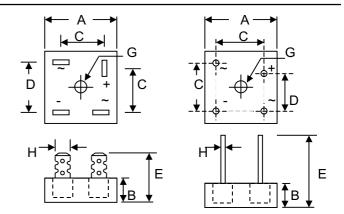
Features

- Diffused Junction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Electrically Isolated Metal Case for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 2500V
- UL Recognized File # E223064
- Green Products in Compliance with the RoHS Directive

Mechanical Data

- Case: Metal Case with Electrically Isolated Epoxy
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Symbols Marked on Case
- Mounting: Through Hole for #8 Screw
- Weight: KBPC 31.6 grams (approx.)
 KBPC-W 28.5 grams (approx.)
- Marking: Type Number

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



	KBPC				KBPC-W					
Dim	Min	Max	Min	Max	Min	Max	Min	Max		
Α	28.40	28.7	1.118	1.130	28.40	28.7	1.118	1.130		
В	10.97	11.23	0.432	0.442	10.97	11.23	0.432	0.442		
С	15.70	16.70	0.618	0.657	17.10	19.10	0.673	0.752		
D	17.50	18.50	0.689	0.728	10.90	11.90	0.429	0.469		
Е	22.86	25.40	0.90	1.00	30.50	_	1.201	_		
G	Hole for #8 screw, 4.90mm(0.193inch)ØNormina									
Н	6.35 7	Typical 0.25 T		Typical	0.97Ø	1.07Ø	0.038Ø	0.042Ø		
	In mm		In inch		In mm		In inch			

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

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

Characteristic	Symbol	KBPC 1000/W-G	KBPC 1001/W-G	KBPC 1002/W-G	KBPC 1004/W-G	KBPC 1006/W-G	KBPC 1008/W-G	KBPC 1010/W-G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	V
Average Rectified Output Current @T _A = 50°C	lo	10							Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	200							Α
Forward Voltage (per element) @I _F = 5.0A	VFM	1.2							٧
Peak Reverse Current @T _C = 25°C At Rated DC Blocking Voltage @T _C = 125°C	IRM	10 1.0							μA mA
Typical Junction Capacitance (Note 1)	Cj	300							pF
Typical Thermal Resistance (Note 2)	R_{θ} JC	6.3							K/W
RMS Isolation Voltage from Case to Lead	Viso	2500							V
Operating and Storage Temperature Range	Тj, Тsтg	-65 to +150							°C

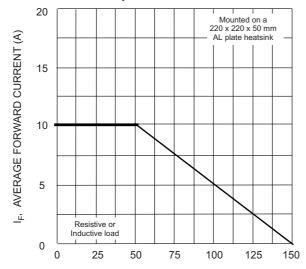
^{*} Glass passivated forms are available upon request.

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

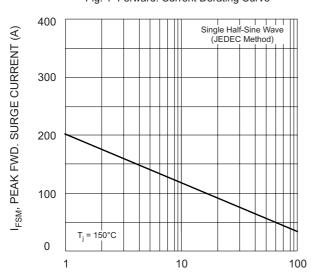
2. Thermal resistance junction to case per element mounted on heatsink.

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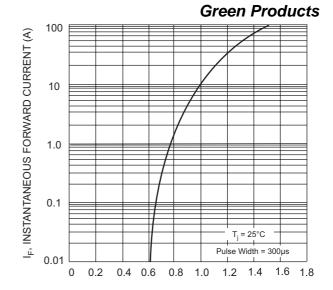
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T_A, AMBIENT TEMPERATURE (°C) Fig. 1 Forward. Current Derating Curve



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



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

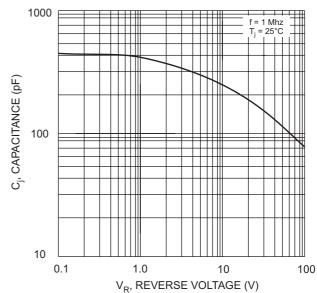
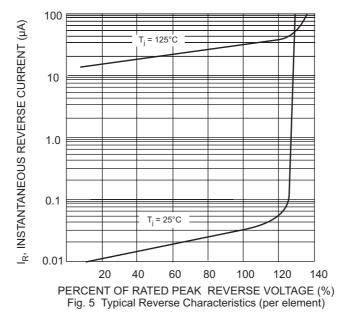


Fig. 4 Typical Junction Capacitance (per element)



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KBPC1000/W-G - KBPC1010/W-G

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