

KBPC15, 25, 35P/W SERIES

15, 25, 35A HIGH CURRENT BRIDGE RECTIFIER

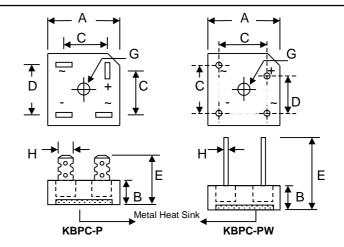
Features

- 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	
Α	28.40	28.70	28.40	28.70	
В	10.97	11.23	10.97	11.23	
С	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					
Н	6.35 Typical		0.97Ø	1.07Ø	
All Dimension in mm					

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

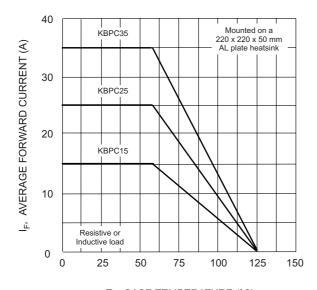
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristics		Symbol	-00P/W	-01P/W	-02P/W	-04P/W	-06P/W	-08P/W	-10P/W	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	RMS Reverse Voltage		35	70	140	280	420	560	700	٧
Average Rectifier Output Current @T _C = 60°C KBPC15 KBPC25 KBPC35		lo	15 25 35					А		
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave Superimposed on rated load (JEDEC Method) KBPC15 KBPC25 KBPC35		IFSM	300 300 400					А		
Forward Voltage Drop (per element) $ \begin{array}{ll} \text{KBPC15 }@I_F = 7.5\text{A} \\ \text{KBPC25 }@I_F = 12.5\text{A} \\ \text{KBPC35 }@I_F = 17.5\text{A} \\ \end{array} $		VFM	1.1					٧		
Peark Reverse Current At Rated DC Blocking Voltage	@T _C = 25°C @T _C = 125°C	IRM				10 0.5				μA mA
I ² t Rating for Fusing (t < 8.3ms) (Note 1)	KBPC15 KBPC25 KBPC35	l ² t				373 373 664				A ² s

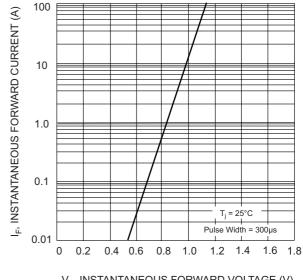
$\textbf{Maximum Ratings and Electrical Characteristics} \ @T_A=25^{\circ}C \ \, \text{unless otherwise specified}$

Typical Junction Capacitance (per element) (Note 2)	KBPC15 KBPC25 KBPC35	Cj	200 300 400	pF
Typical Thermal Resistance Junction to Case (per element) (Note 3)	KBPC15 KBPC25 KBPC35	$R_{ heta}$ JC	6.3 3.8 3.8	K/W
RMS Isolation Voltage from Case to Lead		Viso	2500	٧
Operating and Storage Temperature Range		Тj, Тsтg	-65 to +125	°C

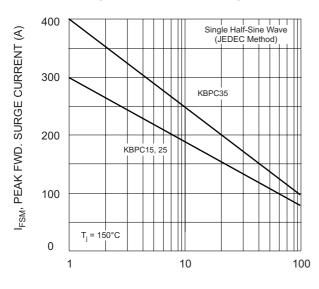
Note: 1. Measured at non-repetitive, for t > 1ms and < 8.3ms.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
3. Thermal resistance junction to case mounted on heatsink.



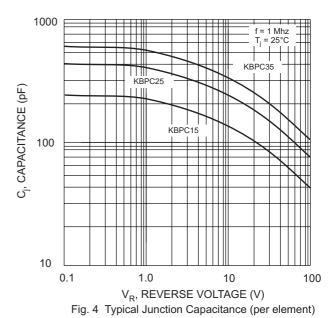
 $T_{\rm C}$, CASE TEMPERATURE (°C) Fig. 1 Forward. Current Derating Curve



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



100 INSTANTANEOUS REVERSE CURRENT (µA) = 125°C 10 1.0 0.1 T_i = 25°C 0.01 140 20 40 60 80 100 120 PERCENT OF RATED PEAK REVERSE VOLTAGE (%) Fig. 5 Typical Reverse Characteristics (per element)

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
KBPCxx00P	Square Bridge	50 Units/Box
KBPCxx00PW	Square Bridge	50 Units/Box
KBPCxx01P	Square Bridge	50 Units/Box
KBPCxx01PW	Square Bridge	50 Units/Box
KBPCxx02P	Square Bridge	50 Units/Box
KBPCxx02PW	Square Bridge	50 Units/Box
KBPCxx04P	Square Bridge	50 Units/Box
KBPCxx04PW	Square Bridge	50 Units/Box
KBPCxx06P	Square Bridge	50 Units/Box
KBPCxx06PW	Square Bridge	50 Units/Box
KBPCxx08P	Square Bridge	50 Units/Box
KBPCxx08PW	Square Bridge	50 Units/Box
KBPCxx10P	Square Bridge	50 Units/Box
KBPCxx10PW	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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