

KBPC15, 25, 35/W SERIES

15, 25, 35A HIGH CURRENT BRIDGE RECTIFIER

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 # E157705

Mechanical Data

Case: Metal Case with Electrically Isolated Epoxy

Terminals: Plated Leads Solderable per MIL-STD-202, Method 208

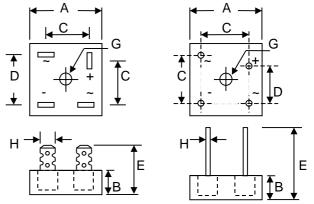
Polarity: Symbols Marked on Case

Mounting: Through Hole for #10 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



(RPC	KBPC-W
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	KBPC		KBP	C-W	
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	-00/W	-01/W	-02/W	-04/W	-06/W	-08/W	-10/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	VR(RMS)	35	70	140	280	420	560	700	>
Average Rectifier Output Current @T _C = 60°C KBPC35	lo				15 25 35				Α
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave Superimposed on rated load (JEDEC Method) KBPC15 KBPC25 KBPC35	IFSM	300 400 400				А			
Forward Voltage Drop (per element) $ \begin{array}{ll} \text{KBPC15 @I_F = 7.5A} \\ \text{KBPC25 @I_F = 12.5A} \\ \text{KBPC35 @I_F = 17.5A} \\ \end{array} $	VFM	1.2			V				
$ \begin{array}{lll} \mbox{Peark Reverse Current} & \mbox{$@T_{\text{C}}$ = 25°C} \\ \mbox{At Rated DC Blocking Voltage} & \mbox{$@T_{\text{C}}$ = 125°C} \\ \end{array} $	IRM				10 1.0				μA mA
l ² t Rating for Fusing (t < 8.3ms) (Note 1) KBPC15 KBPC25 KBPC35	l ² t				373 373 664				A ² s

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

Typical Junction Capacitance (per element) (Note 2)	Cj	300	pF
Typical Thermal Resistance Junction to Case (per element) (Note 3) KBPC15 KBPC25 KBPC35	R⊕JC	6.3 3.8 2.7	K/W
RMS Isolation Voltage from Case to Lead	Viso	2500	V
Operating and Storage Temperature Range	Тj, Tsтg	-65 to +150	°C

* Glass passivated forms are available upon request.

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