

KBPC35005/W - KBPC3510/W

35A BRIDGE RECTIFIER

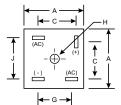
Features

- Diffused Junction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Surge Overload Rating to 400A Peak
- Electrically Isolated Metal Case for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 1500V
- UL Listed: Recognized Component Index, File Number E95060

Mechanical Data

- Case: High Conductivity Metal
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Symbols Marked on Case
- Mounting: Through Hole for #10 Screw
- Mounting Torque: 8.0 Inch-pounds Maximum
- Weight: KBPC 31.6 grams (approx)KBPC-W 28.5 grams (approx)
- Mounting Position: AnyMarking: Type Number

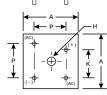




KBPC



KBPC-W



KBPC / KBPC-W							
Dim	Min	Max					
Α	28.40	28.70					
В	10.97	11.23					
С	15.50	17.60					
E	22.86	25.40					
G	13.30	15.30					
н	Hole for #10 screw						
	4.85∅	5.59Ø					
J	17.10	19.10					
K	10.40	12.40					
L	0.97∅	1.07Ø					
М	30.50	_					
N	10.97	11.23					
Р	17.10	19.10					
All Dimensions in mm							

"W" Suffix Designates Wire Leads No Suffix Designates Fast-on Terminals

Maximum Ratings and Electrical Characteristics

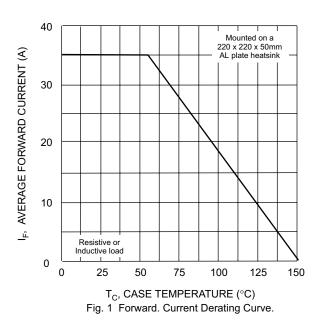
@ T_A = 25°C unless otherwise specified

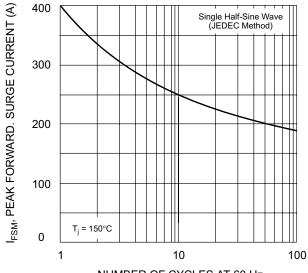
Single phase, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic		Symbol	KBPC35 005/W	KBPC35 01/W	KBPC35 02/W	KBPC35 04/W	KBPC35 06/W	KBPC35 08/W	KBPC35 10/W	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	٧
RMS Reverse Voltage		V _{R(RMS)}	35	70	140	280	420	560	700	٧
Average Rectified Output Current	@ T _C = 55°C	I _O	35						Α	
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		I _{FSM}	400							Α
Forward Voltage (per element)	@ I _F = 17.5A	V _{FM}	1.2						٧	
Peak Reverse Current at Rated DC Blocking Voltage	@ T _C = 25°C @ T _C = 125°C	I _{RM}	10 1.0				μA mA			
I ² t Rating for Fusing (t < 8.3ms) (Note 3)		I ² t	664							A ² s
Typical Junction Capacitance (Note 2)		Cj	300							pF
Typical Thermal Resistance Junction to Case		$R_{\theta JC}$	2.7							K/W
Operating and Storage Temperature Range		T _{j,} T _{STG}	-65 to +150							°C

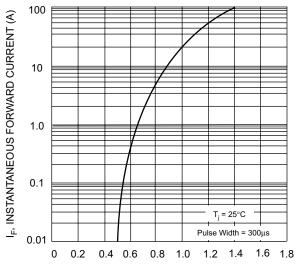
Notes

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

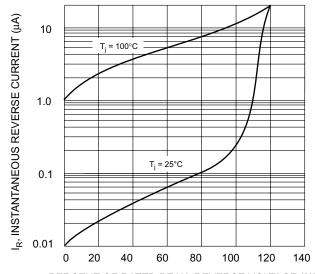




NUMBER OF CYCLES AT 60 Hz Fig. 3 Maximum Non-Repetitive Surge Current



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



PERCENT OF RATED PEAK REVERSE VOLTAGE (%) Fig. 4 Typical Reverse Characteristics (per element)