



KBPC35005/W - KBPC3510/W

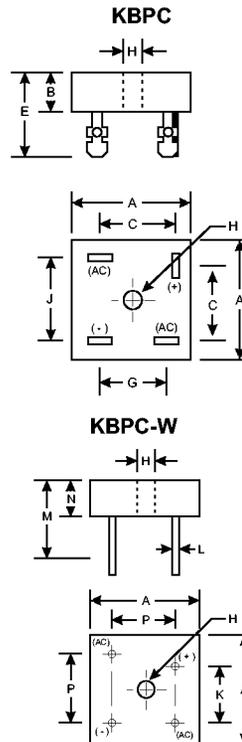
35A BRIDGE RECTIFIER

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: Any
- Marking: Type Number



KBPC / KBPC-W		
Dim	Min	Max
A	28.40	28.70
B	10.97	11.23
C	15.50	17.60
E	22.86	25.40
G	13.30	15.30
H	Hole for #10 screw	
	4.85Ø	5.59Ø
J	17.10	19.10
K	10.40	12.40
L	0.97Ø	1.07Ø
M	30.50	—
N	10.97	11.23
P	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	KBPC35005/W	KBPC3501/W	KBPC3502/W	KBPC3504/W	KBPC3506/W	KBPC3508/W	KBPC3510/W	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V _{RWM}								
DC Blocking Voltage	V _R								
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current @ T _C = 55°C	I _O	35							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	400							A
Forward Voltage (per element) @ I _F = 17.5A	V _{FM}	1.2							V
Peak Reverse Current @ T _C = 25°C at Rated DC Blocking Voltage @ 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)	C _j	300							pF
Typical Thermal Resistance Junction to Case	R _{θJC}	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.

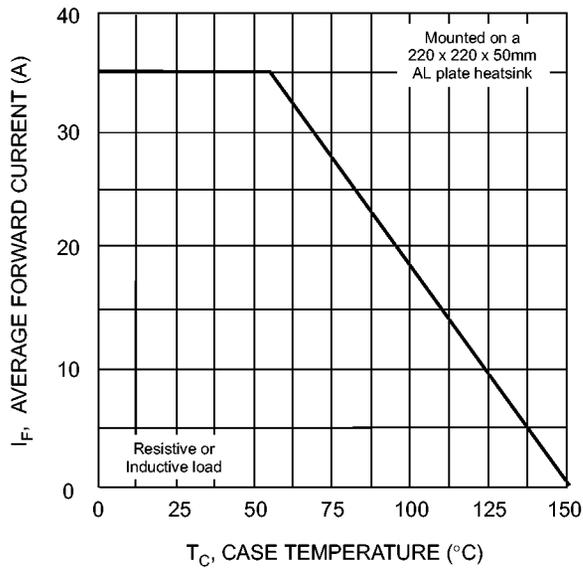


Fig. 1 Forward Current Derating Curve.

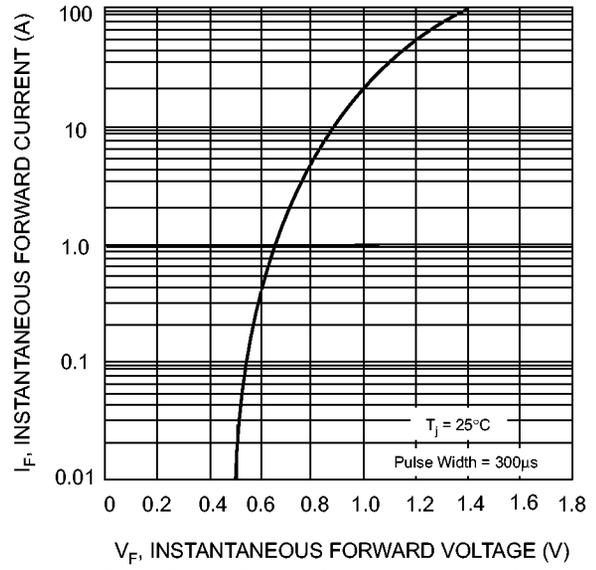


Fig. 2 Typical Forward Characteristics (per element)

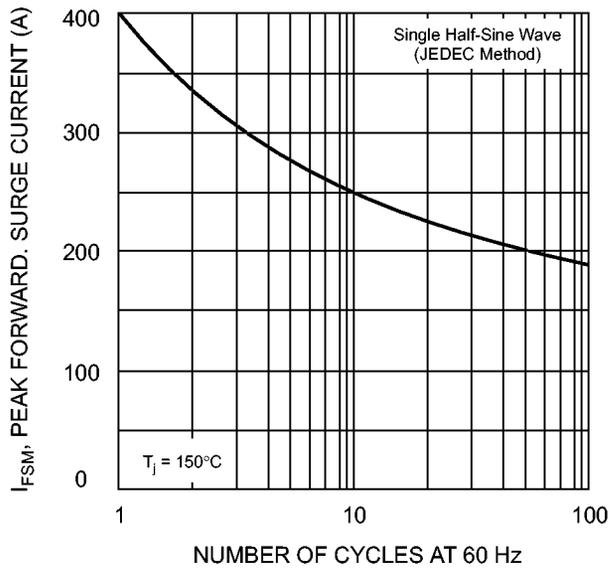


Fig. 3 Maximum Non-Repetitive Surge Current

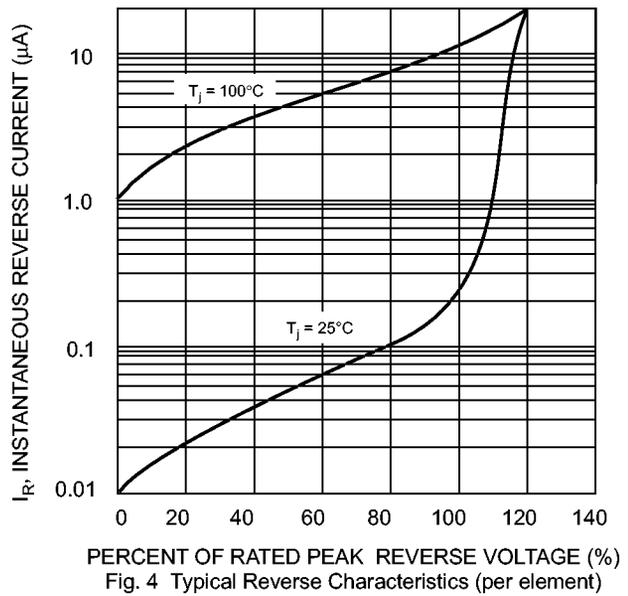


Fig. 4 Typical Reverse Characteristics (per element)