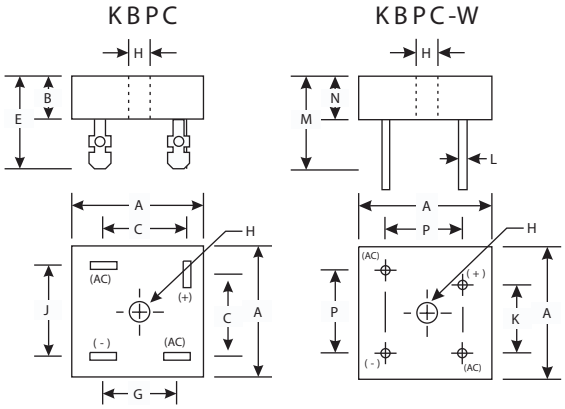
KBPC35005/W THRU KBPC3510/W

CURRENT 35.0 Amperes
VOLTAGE 50 to 1000 Volts

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
- High Case Dielectric Strength of 1500V_{RMS}



KBPC / KBPC-W					
Dim	Min	Max	Dim	Min	Max
A	28.40	28.70	J	17.10	19.10
B	10.97	11.23	K	10.40	12.40
C	15.50	17.60	L	0.97 Ø	1.07 Ø
E	22.86	25.40	M	30.50	—
G	13.30	15.30	N	10.97	11.23
H	Hole for #10 screw		P	17.10	19.10
	4.85 Ø	5.59 Ø			
All Dimensions in mm					

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

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

Maximum Ratings And Electrical Characteristics

(Ratings at 25℃ ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

	Symbols	KBPC35 005/W	KBPC35 01/W	KBPC35 02/W	KBPC35 04/W	KBPC35 06/W	KBPC35 08/W	KBPC35 10/W	Units
Peak Repetitive Reverse voltage Working Peak Reverse voltage DC Blocking voltage	V_{RMM} V_{RWM} V_R	50	100	200	400	600	800	1000	Volts
RMS Reverse voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	Volts
Average Rectified Output Current @ T_C=55℃	Io	35							Amps
Non-Repetitive Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	400							Amps
Forward voltage (per element) @ I_F=17.5 A	V_{FM}	1.2							Volts
Peak Reverse Current at Rated DC Blocking voltage @ T_C=25℃	I_R	10							μA
Peak Reverse Current at Rated DC Blocking voltage @ T_C=125℃	I_R	1.0							mA
I^2t Rating for Fusing (t<8.3ms) (Note 2)	I^2t	664							A^2S
Typical Junction Capacitance (Note 3)	C_j	300							pF
Typical Thermal Resistance Junction to Case	$R\theta_{JA}$	2.7							℃/W
Operating and Storage Temperature Range	T_j T_{STG}	-65 to +150							℃

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

RATINGS AND CHARACTERISTIC CURVES KBPC35005/W THRU KBPC3510/W

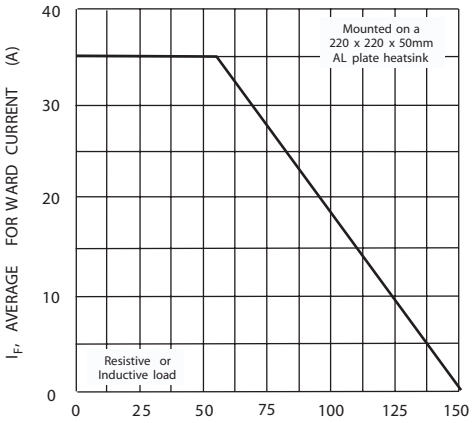


Fig. 1 Forward. Current Derating Curve.

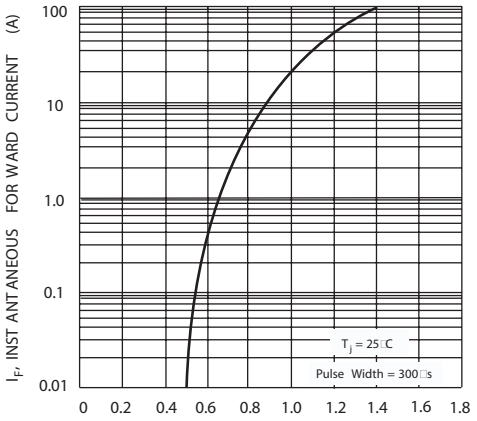


Fig. 2 Typical Forward Characteristics (per element)

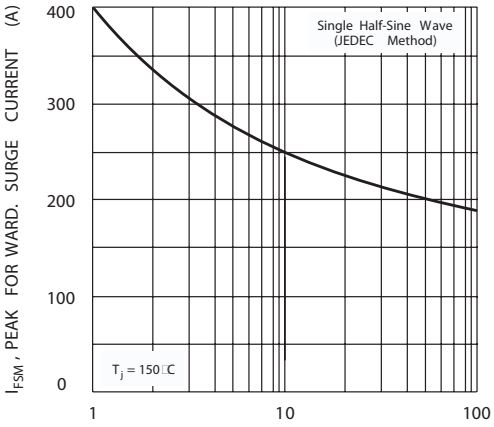


Fig. 3 Maximum Non-Repetitive Surge Current

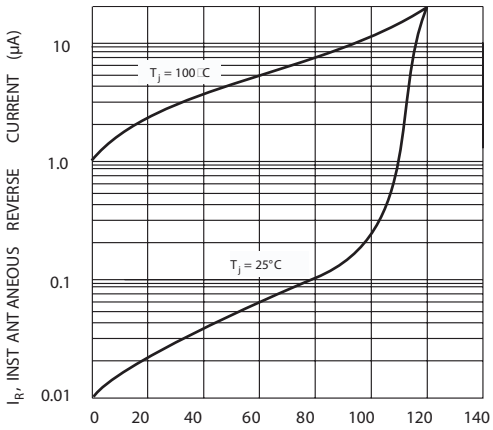


Fig. 4 Typical Reverse Characteristics (per element)