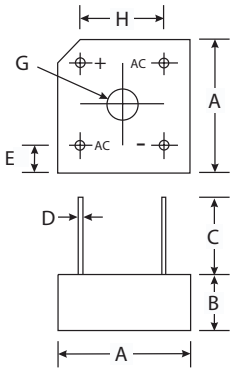
KBPC10005 THRU KBPC1010

CURRENT 10.0 Amperes
VOLTAGE 50 to 1000 Volts

Features

- Diffused Junction
- High Current Capability
- Surge Overload Rating to 150A Peak
- High Case Dielectric Strength of 1500V
- Ideal for Printed Circuit Board Applications
- Plastic Material - UL Flammability Classification 94V-0



KBPC-8		
Dim	Min	Max
A	18.54	19.56
B	6.35	7.60
C	22.20	—
D	1.27 ϕ Typical	
E	5.33	7.37
G	3.60 ϕ	4.00 ϕ
H	12.70 Typical	
J	2.38 X 45° Typical	
All Dimensions in mm		

Mechanical Data

- Case : Molded Plastic
- Terminals : Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity : Marked on Body
- Mounting : Through Hole for #6 Screw
- Mounting Torque : 5.0 Inch-pounds Maximum
- Weight : 5.4 grams (approx.)
- 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	KBPC 10005	KBPC 1001	KBPC 1002	KBPC 1004	KBPC 1006	KBPC 1008	KBPC 1010	Units
Peak Repetitive Reverse voltage Working Peak Reverse voltage DC Blocking voltage	V_{RRM} 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 (Note 1) @ T_C=50℃	I_O	10							Amps
Average Rectified Output Current (Note 2) @ T_C=50℃	I_O	8.0							Amps
Non-Repetitive Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150							Amps
Forward Voltage (per element) @ I_F=5 A	V_{FM}	1.1							Volts
Peak Reverse Current at Rated DC Blocking voltage (per element) @ T_C=25℃	I_R	10							μA
Peak Reverse Current at Rated DC Blocking voltage (per element) @ T_C=125℃	I_R	1.0							mA
I^2t Rating for Fusing (t<8.3ms) (Note 3)	I^2t	64							A^2s
Typical Junction Capacitance per element (Note 4)	C_j	110							pF
Typical Thermal Resistance, Junction to Case (per element)	$R\theta_{JA}$	7.5							℃/W
Operating and Storage Temperature Range	T_j T_{STG}	-65 to +125							℃

Notes:
(1) Mounted on metal chassis.
(2) Mounted on PC board FR-4 material.
(3) Non-repetitive, for t > 1.0ms and < 8.3ms.
(4) Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

RATINGS AND CHARACTERISTIC CURVES KBPC10005 THRU KBPC1010

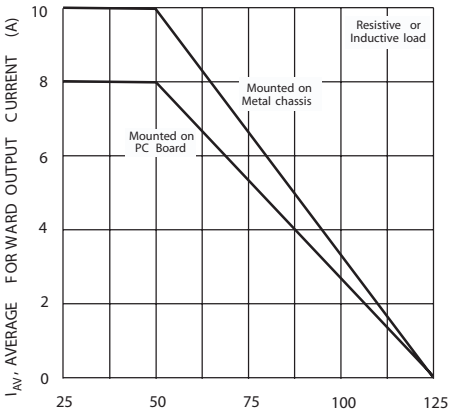


Fig. 1 Forward Current Derating Curve

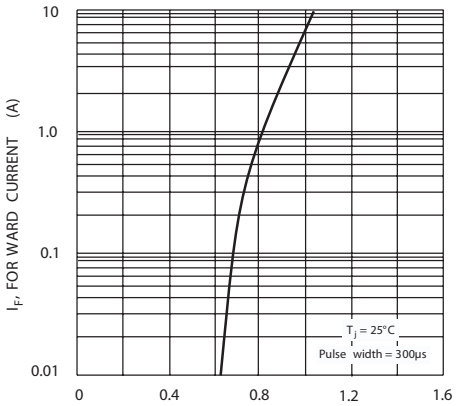


Fig. 2 Typical Forward Characteristics, per element

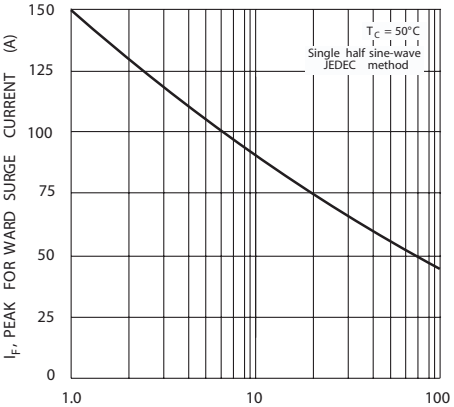


Fig. 3 Typical Reverse Characteristics

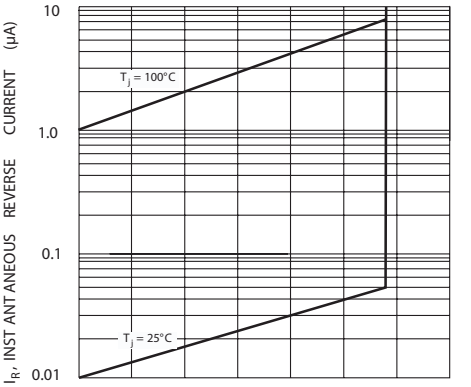


Fig. 4 Typical Reverse Characteristics, per element