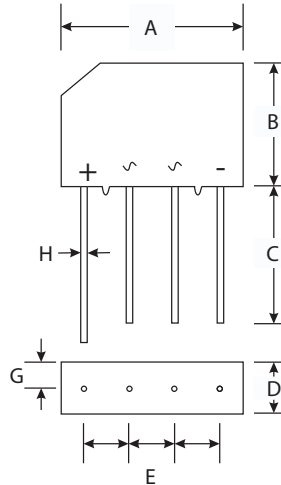


### Features

- Glass Passivated Die Construction
- High Case Dielectric Strength of 1500V<sub>RMS</sub>
- Low Reverse Leakage Current
- Surge Overload Rating to 40A Peak
- Ideal for Printed Circuit Board Applications
- Plastic Material - UL Flammability Classification 94V-0



KBP		
Dim	Min	Max
A	14.00	15.00
B	10.50	11.50
C	15.00	—
D	4.70	5.00
E	3.50	4.00
G	2.30	2.50
H	0.70 Typical	
All Dimensions in mm		

### Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads, Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Approx. Weight: 1.52 grams
- Mounting Position: Any
- Marking: Type Number

### Maximum Ratings And Electrical Characteristics

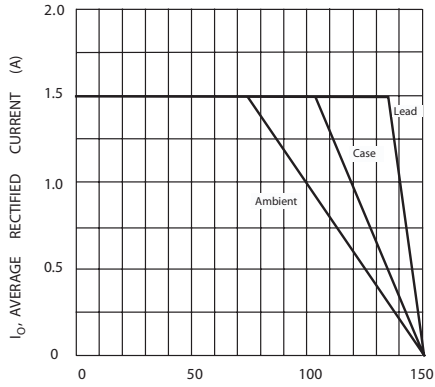
(Ratings at 25 °C ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

	Symbols	KBP 005	KBP 01	KBP 02	KBP 04	KBP 06	KBP 08	KBP 10	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RMM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	Volts
RMS Reverse voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	Volts
Average Rectified Output Current @ T <sub>C</sub> =105 °C	I <sub>o</sub>	2.0							Amps
Non-Repetitive Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load per element (JEDEC method)	I <sub>FSM</sub>	40							Amps
Forward Voltage (per element) @ I <sub>F</sub> =2.0 A	V <sub>FM</sub>	1.1							Volts
Peak Reverse Current at Rated DC Blocking Voltage	@ T <sub>C</sub> =25 °C	5.0							μ A
	@ T <sub>C</sub> =125 °C	500							
Typical Junction Capacitance (Note 1)	C <sub>j</sub>	20							pF
Typical Thermal Resistance, Junction to Case (Note 2)	R <sub>θ JC</sub>	30							°C/W
Operating and Storage Temperature Range	T <sub>J</sub> T <sub>STG</sub>	-65 to +150							°C

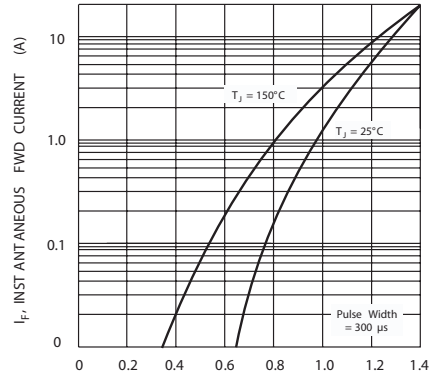
#### Notes:

- (1) Thermal resistance from junction to case per element. Unit mounted on 300 x 300 x 16mm aluminum plate heat sink.
- (2) Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.

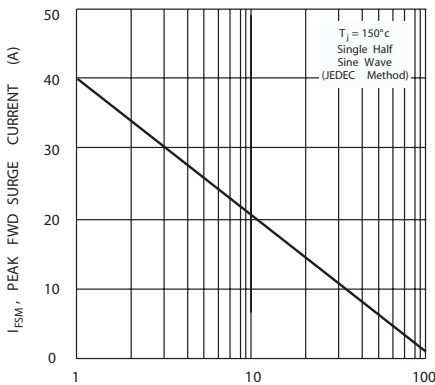
## RATING AND CHARACTERISTIC CURVES KBP005 THRU KBP10



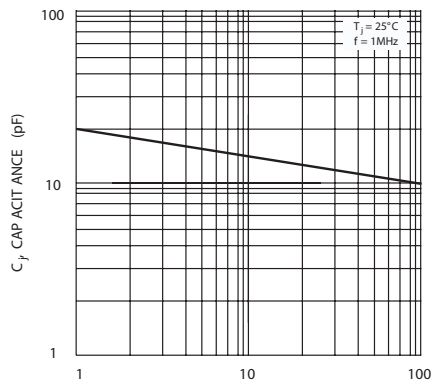
T, TEMPERATURE (°C)  
Fig. 1 Forward Current Derating Curve



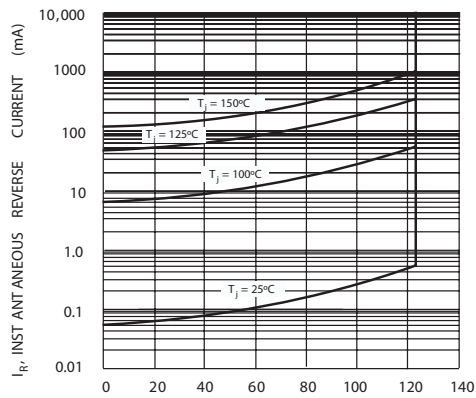
V<sub>F</sub>, INSTANTANEOUS FWD VOLTAGE (V)  
Fig. 2 Typical Fwd Characteristics



NUMBER OF CYCLES AT 60 Hz  
Fig. 3 Max Non-Repetitive Peak Fwd Surge Current



V<sub>R</sub>, REVERSE VOLTAGE (V)  
Fig. 4 Typical Junction Capacitance



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)  
Fig. 5 Typical Reverse Characteristics