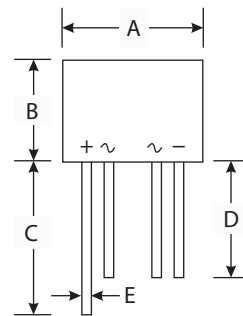


## KB151 THRU KB157

CURRENT 1.5 Amperes  
VOLTAGE 50 to 1000 Volts

### Features

- Glass Passivated Die Construction
- Diffused Junction
- Low Forward Voltage Drop, High Current Capability
- Surge Overload Rating to 50A Peak
- Ideal for Printed Circuit Boards
- Case to Terminal Isolation Voltage 1500V
- Plastic Material - UL Flammability Classification Rating 94V-0



WOB		
Dim	Min	Max
A	8.84	9.86
B	4.00	4.60
C	27.90	—
D	25.40	—
E	0.71	0.81
G	4.60	5.60
All Dimensions in mm		

### Mechanical Data

- Case : WOB, Molded Plastic
- Terminals : Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity : As Marked on Body
- Weight : 1.3 grams (approx.)
- 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	KB151	KB152	KB153	KB154	KB155	KB156	KB157	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	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Average Rectified Output Current @ $T_A=25^\circ\text{C}$	$I_o$	1.5							Amps
Non-Repetitive Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	50							Amps
Forward Voltage (per element) @ $I_F=1.5\text{ A}$	$V_{FM}$	1.0							Volts
Peak Reverse Current at Rated DC Blocking Voltage	@ $T_A=25^\circ\text{C}$	5.0							$\mu\text{A}$
	@ $T_A=100^\circ\text{C}$	500							
Typical Junction Capacitance (Note 1)	$C_j$	12							pF
Typical Thermal Resistance, Junction to Case (Note 2)	$R_{\theta JA}$	84							$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_j$ $T_{STG}$	-65 to +150							$^\circ\text{C}$

#### Notes:

- (1) Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.
- (2) Thermal Resistance from junction to case mounted on PC board with 13 x 13mm (0.03mm thick) land areas.

## RATING AND CHARACTERISTIC CURVES KB151 THRU KB157

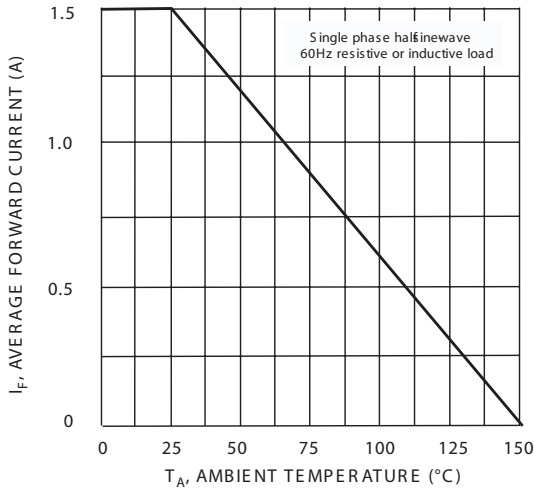


Fig. 1 Forward Current Derating Curve

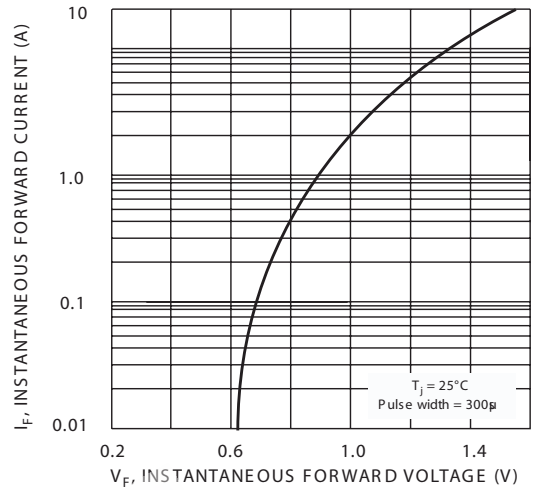


Fig. 2 Typical Forward Characteristics

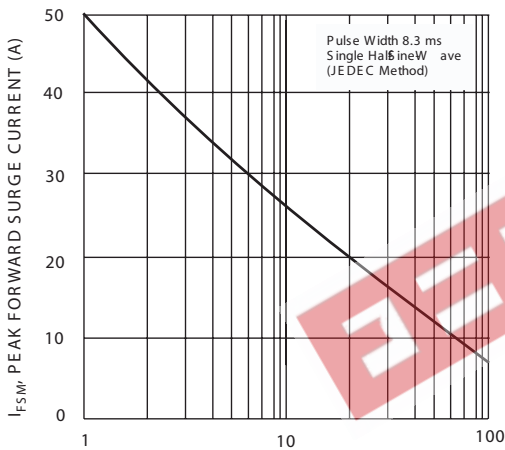


Fig. 3 Max NonRepetitive Surge Current

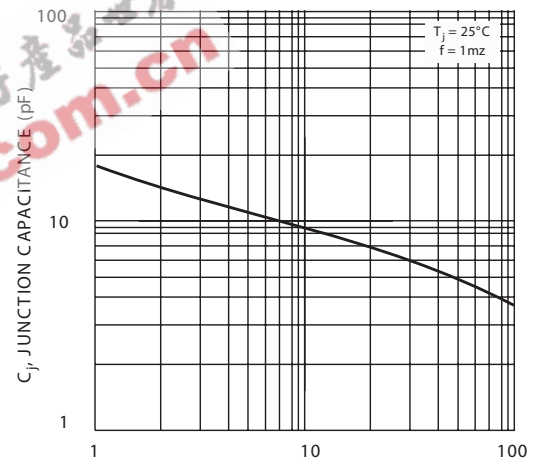


Fig. 4 Typical Junction Capacitance

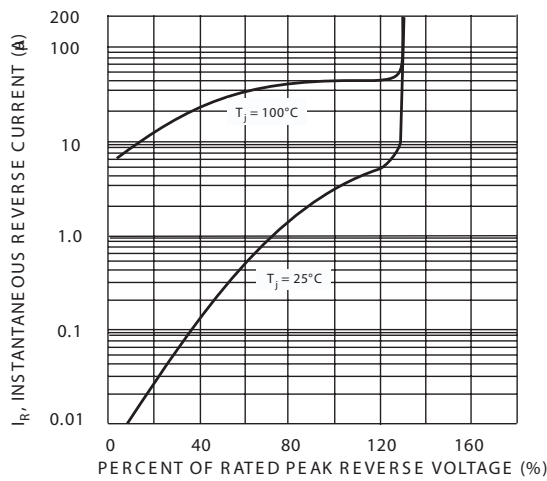


Fig. 5 Typical Reverse Characteristics