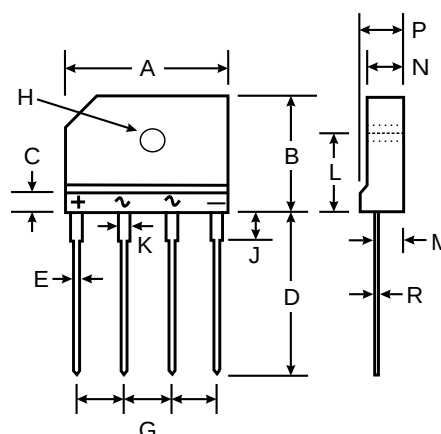


Features

- Glass Passivated Die Construction
- High Case Dielectric Strength of 1500VRMS
- Low Reverse Leakage Current
- Surge Overload Rating to 350A Peak
- Ideal for Printed Circuit Board Applications
- Plastic Material - UL Flammability Classification 94V-0
- Lead Free Finish/RoHS Compliant

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads, Solderable per MIL-STD-202, Method 208
- Polarity: Molded on Body
- Mounting: Through Hole for #6 Screw
- Mounting Torque: 5.0 in-lbs Maximum
- Weight: 6.6 grams (approx)
- Marking: Type Number



KBJ4		
Dim	Min	Max
A	24.80	25.20
B	14.70	15.30
C	4.00 Nominal	
D	17.20	17.80
E	0.90	1.10
G	7.30	7.70
H	3.10 $\varnothing$	3.40 $\varnothing$
J	3.30	3.70
K	1.50	1.90
L	9.30	9.70
M	2.50	2.90
N	3.40	3.80
P	4.40	4.80
R	0.60	0.80
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	KBJ 35005	KBJ 3501	KBJ 3502	KBJ 3504	KBJ 3506	KBJ 3508	KBJ 3510	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Forward Rectified Output Current @ $T_C = 100^\circ\text{C}$	I_O	35							A
Non-Repetitive Peak Forward Surge Current, 8.3 ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	350							A
Forward Voltage (per element) @ $I_F = 17.5\text{A DC}$	V_{FM}	1.05							V
Peak Reverse Current @ $T_C = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_C = 125^\circ\text{C}$	I_R	2.0 500							μA
I^2t Rating for Fusing ($t < 8.3\text{ms}$) (Note 1)	I^2t	240							A^2s
Typical Junction Capacitance per Element (Note 2)	C_j	60							pF
Typical Thermal Resistance, Junction to Case (Note 3)	$R_{\theta JC}$	0.8							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +150							$^\circ\text{C}$

- Notes:
1. Non-repetitive, for $t > 1\text{ms}$ and $< 8.3\text{ms}$.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
 3. Thermal resistance from junction to case per element. Unit mounted on 300 x 300 x 1.6mm copper plate heat sink.

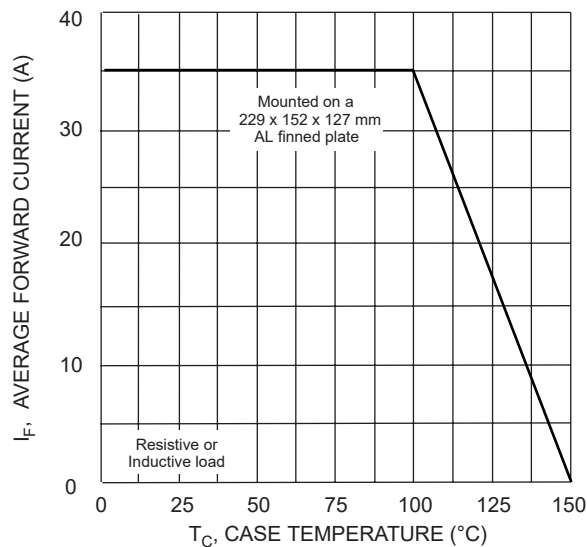


Fig. 1 Forward Current Derating Curve

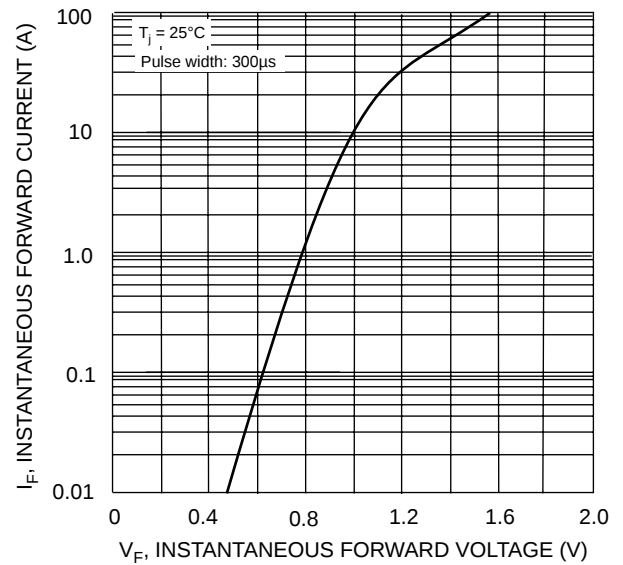


Fig. 2 Typical Forward Characteristics

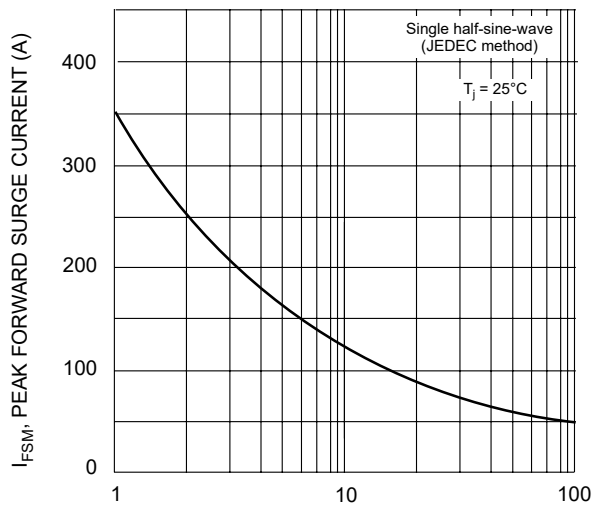


Fig. 3 Maximum Non-Repetitive Surge Current

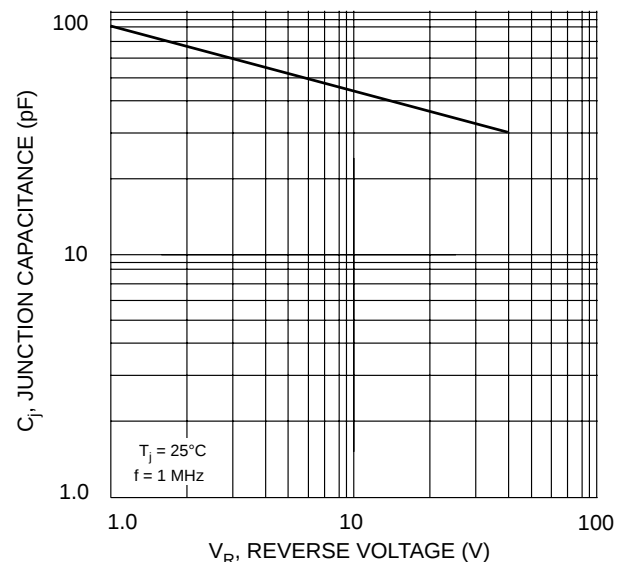


Fig. 4 Typical Junction Capacitance

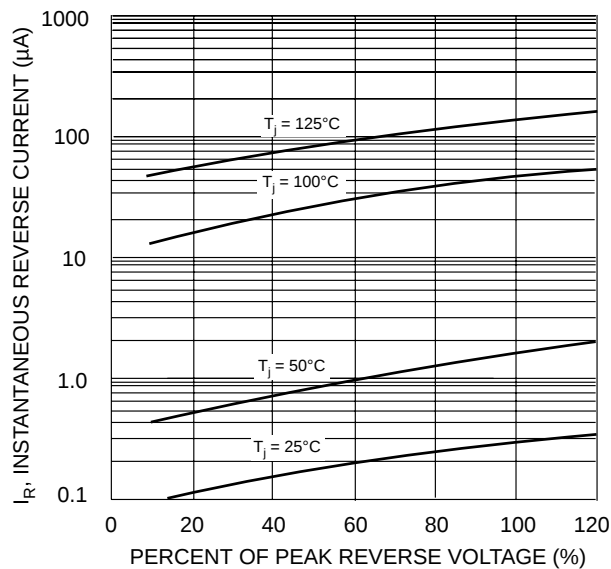


Fig. 5 Typical Reverse Characteristics