

# Zibo Seno Electronic Engineering Co., Ltd.



## KBJ4005 - KBJ410



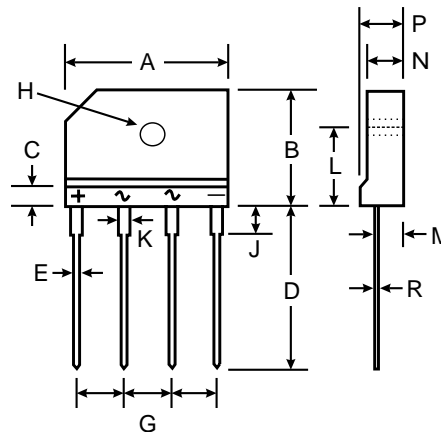
### 4.0A GLASS PASSIVATED BRIDGE RECTIFIER

#### Features

- Glass Passivated Die Construction
- High Case Dielectric Strength of 1500V<sub>RMS</sub>
- Low Reverse Leakage Current
- Surge Overload Rating to 120A Peak
- Ideal for Printed Circuit Board Applications
- Plastic Material - UL Flammability Classification 94V-0
- Lead Free: For RoHS / Lead Free Version

#### 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
- Approx. Weight: 4.6 grams
- 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<sub>A</sub> = 25°C unless otherwise specified

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

Characteristic	Symbol	KBJ 4005	KBJ 401	KBJ 402	KBJ 404	KBJ 406	KBJ 408	KBJ 410	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)}</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current @ T <sub>C</sub> = 115°C	I <sub>O</sub>	4.0							A
Non-Repetitive Peak Forward Surge Current, 8.3 ms single half-sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	120							A
Forward Voltage per element @ I <sub>F</sub> = 2.0A	V <sub>FM</sub>	1.0							V
Peak Reverse Current @ T <sub>C</sub> = 25°C @ T <sub>C</sub> = 125°C	I <sub>RM</sub>	5.0 500							μA
Typical Junction Capacitance per Element (Note 1)	C <sub>j</sub>	40							pF
Typical Thermal Resistance (Note 2)	R <sub>θJC</sub>	5.5							°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +150							°C

- Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.  
2. Thermal resistance from junction to case per element. Unit mounted on 300 x 300 x 1.6mm aluminum plate heat sink.

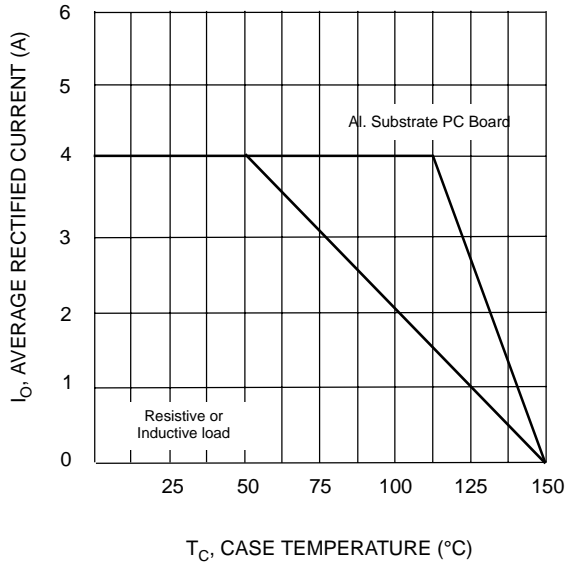


Fig. 1 Forward Current Derating Curve

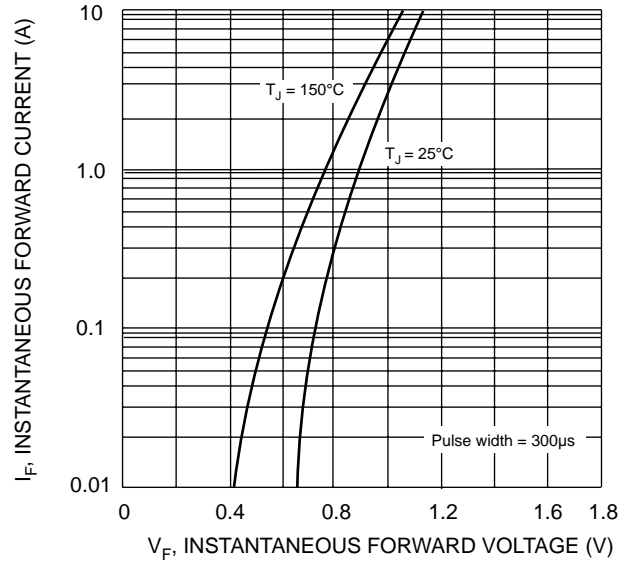


Fig. 2 Typical Forward Characteristics

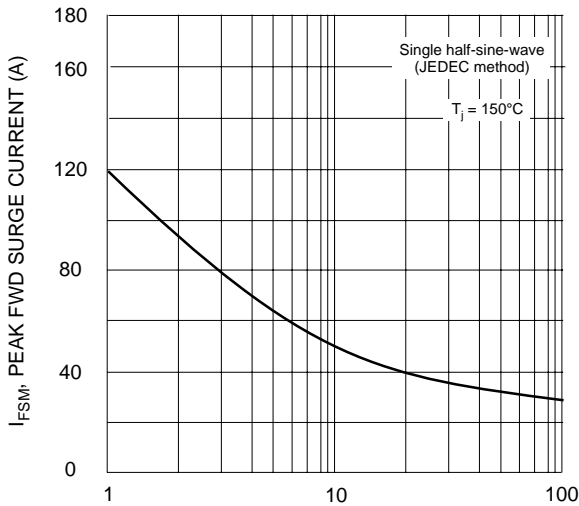


Fig. 3 Max Non-Repetitive Surge Current

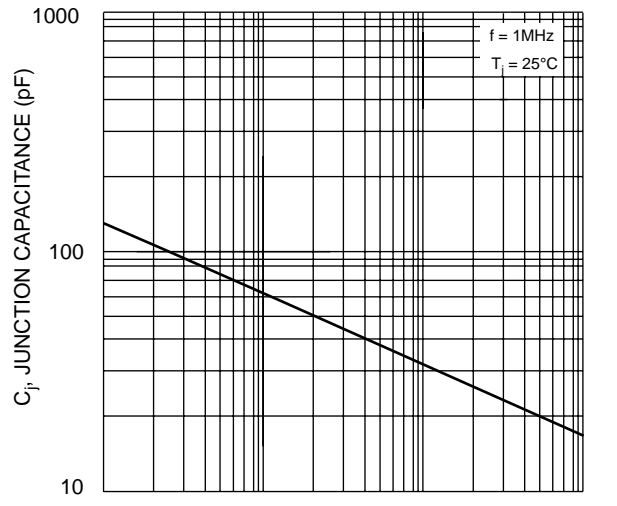


Fig. 4 Typical Junction Capacitance

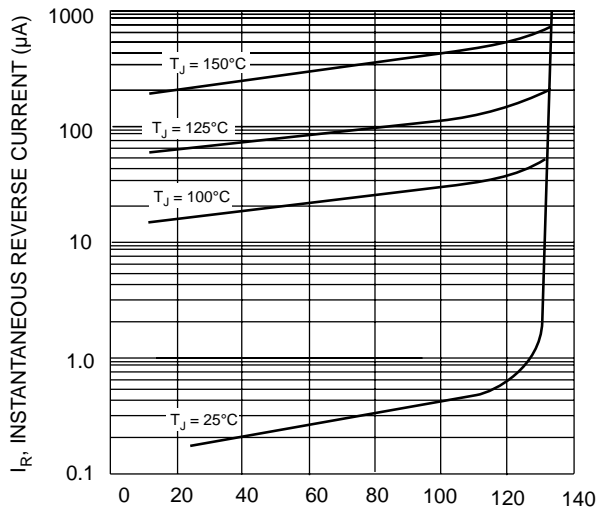


Fig. 5 Typical Reverse Characteristics