KBJ4005G - KBJ410G

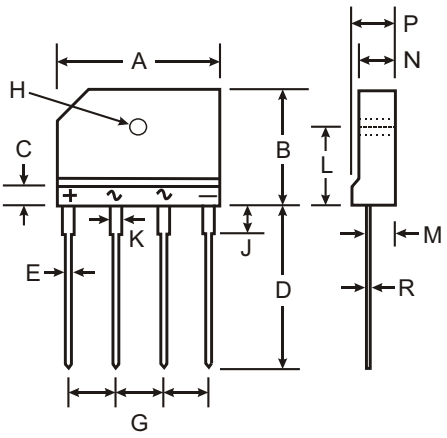
4.0A GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass Passivated Die Construction
- High Case Dielectric Strength of 1500V_{RMS}
- Low Reverse Leakage Current
- Surge Overload Rating to 120A Peak
- Ideal for Printed Circuit Board Applications
- Plastic Material - UL Flammability Classification 94V-0
- UL Listed Under Recognized Component Index, File Number E94661

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



KBJ		
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 ∅	3.40 ∅
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°C unless otherwise specified

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

Characteristic	Symbol	KBJ 4005G	KBJ 401G	KBJ 402G	KBJ 404G	KBJ 406G	KBJ 408G	KBJ 410G	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 Rectified Output Current @ T_C = 115°C	I_O	4.0							A
Non-Repetitive Peak Forward Surge Current, 8.3 ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	120							A
Forward Voltage per element @ I_F = 2.0A	V_{FM}	1.0							V
Peak Reverse Current @T_C = 25°C at Rated DC Blocking Voltage @ T_C = 125°C	I_{RM}	5.0 500							µA
Typical Junction Capacitance per Element (Note 1)	C_j	40							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	5.5							°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-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.

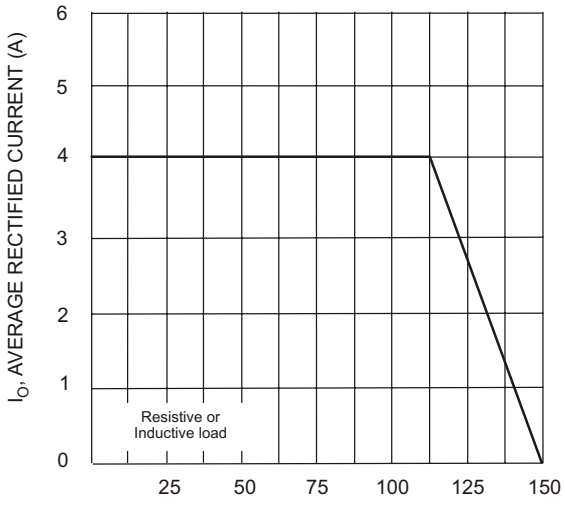


Fig. 1 Forward Current Derating Curve

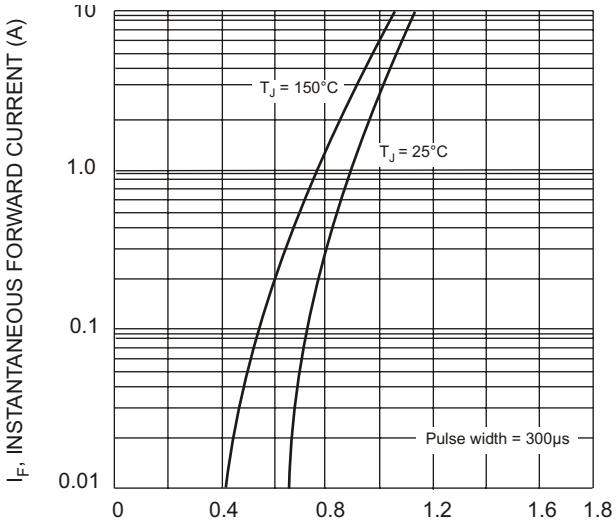


Fig. 2 Typical Forward Characteristics

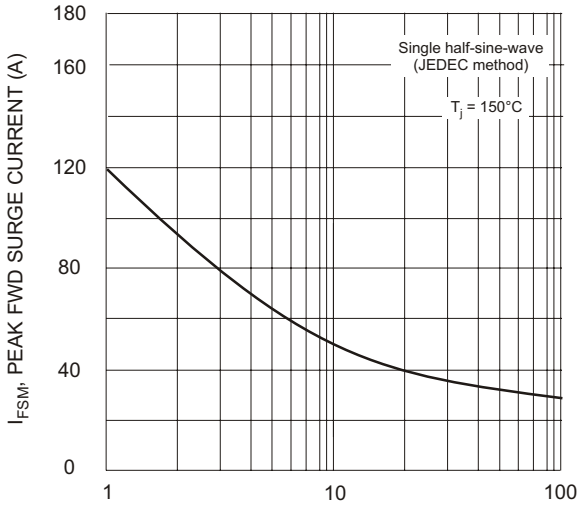


Fig. 3 Max Non-Repetitive Surge Current

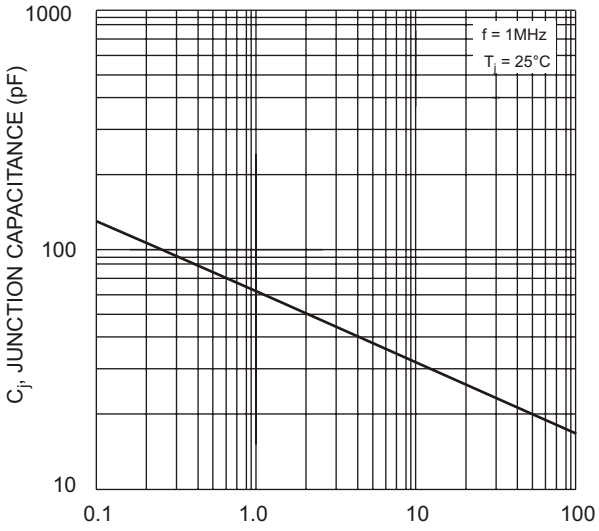


Fig. 4 Typical Junction Capacitance

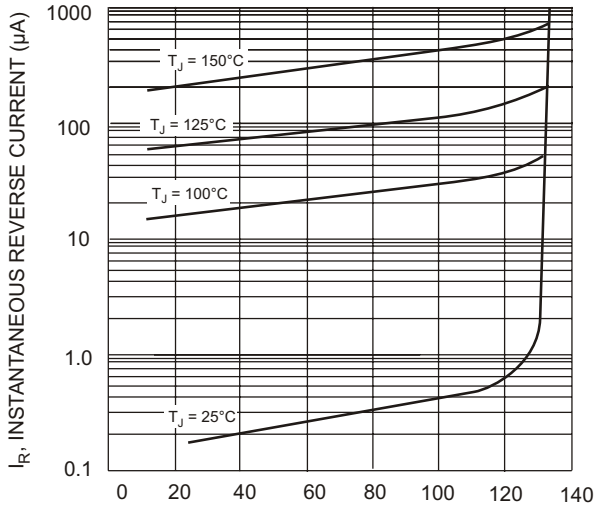


Fig. 5 Typical Reverse Characteristics