

# KBJ4005G - KBJ410G

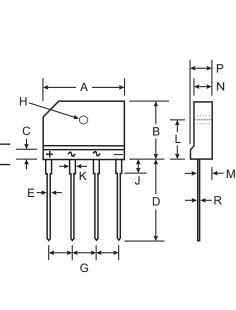
# 4.0A GLASS PASSIVATED BRIDGE RECTIFIER

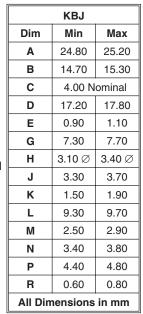
## **Features**

- 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
- UL Listed Under Recognized Component Index, File Number E94661
- Lead Free Finish, RoHS Compliant (Note 4)

### **Mechanical Data**

- Case: KBJ
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Finish Tin. Plated Leads, Solderable per MIL-STD-202, Method 208 (23)
- Polarity: Molded on Body
- Mounting: Through Hole for #6 Screw
- Mounting Torque: 5.0 in-lbs Maximum
- Ordering Information: See Last Page
- Marking: Type Number
- Weight: 4.6 grams (approximate)





# 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%.

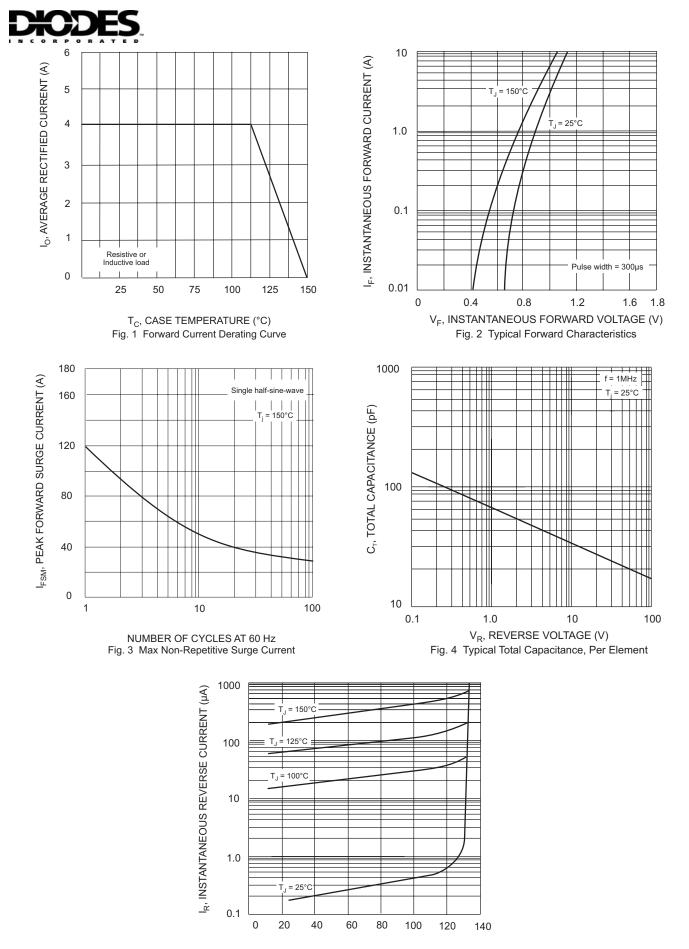
Characteristic	Symbol	KBJ 4005G	KBJ 401G	KBJ 402G	KBJ 404G	KBJ 406G	KBJ 408G	KBJ 410G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_C = 115^{\circ}C$	I <sub>O</sub>	4.0				Α			
Non-Repetitive Peak Forward Surge Current, 8.3 ms single half-sine-wave superimposed on rated load	I <sub>FSM</sub>	120			А				
Forward Voltage per element @ I <sub>F</sub> = 2.0A	V <sub>FM</sub>	1.0			V				
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	I <sub>RM</sub>	5.0 500			μA				
I <sup>2</sup> t Rating for Fusing, t <8.3ms (Note 3)	l <sup>2</sup> t	60			A <sup>2</sup> s				
Typical Total Capacitance per Element (Note 1)	CT	40			pF				
Typical Thermal Resistance (Note 2)	R <sub>0</sub> JC	5.5			°C/W				
Operating and Storage Temperature Range	Tj, TSTG	-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 75 x 75 x 1.6mm aluminum plate heat sink.

3. Non-repetitive, for t >1ms and <8.3ms.

4. RoHs revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 5 and 7.



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



## Ordering Information (Note 5)

Device	Packaging	Shipping		
KBJ4005G	KBJ	20/Tube		
KBJ401G	KBJ	20/Tube		
KBJ402G	KBJ	20/Tube		
KBJ404G	KBJ	20/Tube		
KBJ406G	KBJ	20/Tube		
KBJ408G	KBJ	20/Tube		
KBJ410G	KBJ	20/Tube		

Notes: 5. For packaging details, visit our website at http://www.diodes.com/datasheets/ap02008.pdf

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