

KBJ4005G - KBJ410G

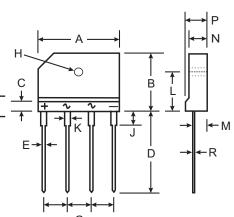
4.0A GLASS PASSIVATED BRIDGE RECTIFIER

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
- 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)



KBJ						
Dim	Min	Max				
Α	24.80	25.20				
В	14.70	15.30				
С	4.00 Nominal					
D	17.20	17.80				
E	0.90	1.10				
G	7.30	7.70				
Н	3.10 ∅	3.40 ∅				
J	3.30	3.70				
K	1.50	1.90				
L	9.30	9.70				
М	2.50	2.90				
N	3.40	3.80				
Р	4.40	4.80				
R	0.60	0.80				
All Dimensions in mm						

Maximum Ratings and Electrical Characteristics @ TA = 25°C unless otherwise specified

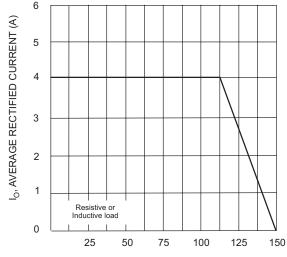
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Sym	nbol	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	VR	RM WM R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V _{R(F}	RMS)	35	70	140	280	420	560	700	٧
Average Rectified Output Current @ T _C = 1	15°C I	0				4.0				Α
Non-Repetitive Peak Forward Surge Current, 8.3 ms shalf-sine-wave superimposed on rated load	single I _F	SM				120				Α
Forward Voltage per element @ I _F =	2.0A V _F	-м				1.0				٧
Peak Reverse Current @ $T_C =$ at Rated DC Blocking Voltage @ $T_C =$ 1	25°C I _R	RM				5.0 500				μА
I ² t Rating for Fusing, t <8.3ms (Note 3)		²t	60					A ² s		
Typical Total Capacitance per Element (Note 1)		T T	40					pF		
Typical Thermal Resistance (Note 2)		JC	5.5					°C/W		
Operating and Storage Temperature Range		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 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.





 $\mathsf{T}_\mathsf{C},\,\mathsf{CASE}\,\mathsf{TEMPERATURE}\,(^\circ\mathsf{C})$ Fig. 1 Forward Current Derating Curve

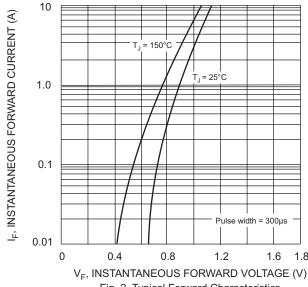
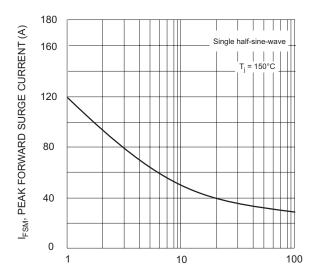


Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz Fig. 3 Max Non-Repetitive Surge Current

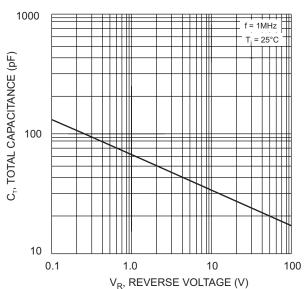
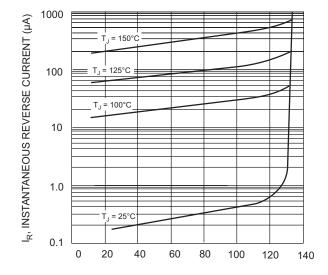


Fig. 4 Typical Total Capacitance, Per Element



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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