

GBJ15005 - GBJ1510

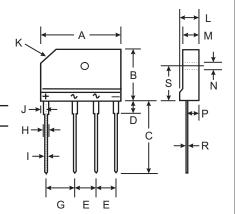
15A GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass Passivated Die Construction
- High Case Dielectric Strength of 1500VRMS
- Low Reverse Leakage Current
- Surge Overload Rating to 240A 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: GBJ
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Plated Leads, Solderable per MIL-STD-202, Method 208 @3
- Lead Free Plating (Tin Finish).
- Polarity: Molded on Body
- Mounting: Through Hole for #6 Screw
- Mounting Torque: 5.0 in-lbs Maximum
- Marking: Type Number
- Weight: 6.6 grams (approximate)



GBJ						
Dim	Min	Max				
Α	29.70	30.30				
В	19.70	20.30				
С	17.00	18.00				
D	3.80	4.20				
E	7.30	7.70				
G	9.80	10.20				
Н	2.00	2.40				
ı	0.90	1.10				
J	2.30	2.70				
K	3.0 X 45°					
L	4.40	4.80				
M	3.40 3.80					
N	3.10	3.40				
Р	2.50	2.90				
R	0.60	0.80				
S	10.80	11.20				
All Dimensions in mm						

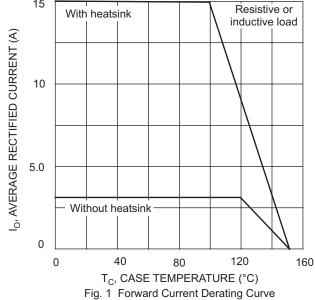
Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

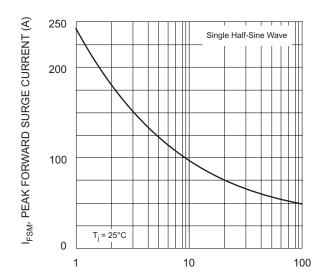
Single phase, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	GBJ 15005	GBJ 1501	GBJ 1502	GBJ 1504	GBJ 1506	GBJ 1508	GBJ 1510	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°C		15						Α	
Non-Repetitive Peak Forward Surge Current, 8.3 ms single half-sine-wave superimposed on rated load		240					Α		
Forward Voltage (per element) @ I _F = 7.5A DC		1.05					V		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		10 500					μА		
I ² t Rating for Fusing (t < 8.3ms) (Note 1)		240					A ² s		
Typical Total Capacitance per Element (Note 2)		60					pF		
Typical Thermal Resistance, Junction to Case (Note 3)		0.8					°C/W		
Operating and Storage Temperature Range		-65 to +150					°C		

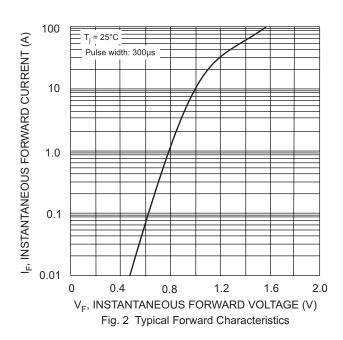
- Notes: 1. Non-repetitive, for t > 1ms and < 8.3 ms.
 - 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
 - 3. Thermal resistance from junction to case per element. Unit mounted on 300 x 300 x 1.6mm copper plate heat sink.
 - 4. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 5 and 7.

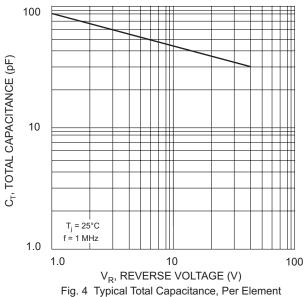






NUMBER OF CYCLES AT 60 Hz Fig. 3 Maximum Non-Repetitive Surge Current





 $I_{\rm R}$, INSTANTANEOUS REVERSE CURRENT (μA) = 125°C 100 = 100°C 10 = 50°C 1.0 . = 25°C 0.1 0 20 40 100 60 80 120 PERCENT OF PEAK REVERSE VOLTAGE (%) Fig. 5 Typical Reverse Characteristics



Ordering Information (Note 5)

Device	Packaging	Shipping
GBJ15005-F	GBJ	15/Tube
GBJ1501-F	GBJ	15/Tube
GBJ1502-F	GBJ	15/Tube
GBJ1504-F	GBJ	15/Tube
GBJ1506-F	GBJ	15/Tube
GBJ1508-F	GBJ	15/Tube
GBJ1510-F	GBJ	15/Tube

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

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