

GBJ25005 - GBJ2510

25A GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass Passivated Die Construction
- High Case Dielectric Strength of 1500V_{RMS}
- Low Reverse Leakage Current
- Surge Overload Rating to 350A Peak
- Ideal for Printed Circuit Board Applications
- Plastic Material UL Flammability Classification 94V-0
- **UL Listed Under Recognized Component** Index, File Number E94661

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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						
I	0.90	1.10						
J	2.30	2.70						
K	3.0 >	X 45°						
L	4.40	4.80						
М	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								

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

Weight: 6.6 grams (approx) Marking: Type Number

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

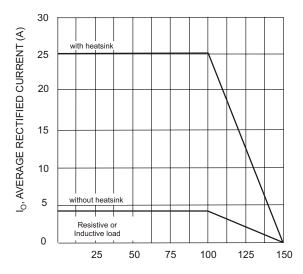
Single phase, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic		Symbol	GBJ 25005	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	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	٧
RMS Reverse Voltage		V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Forward Rectified Output Current (Note 1) @ T _C = 100°C		Io	25							Α
Non-Repetitive Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I _{FSM}	350						А	
Forward Voltage (per element)	@ I _F = 12.5A	V _{FM}	1.05			V				
Peak Reverse Current at Rated DC Blocking Voltage	@T _C = 25°C @ T _C = 125°C	I _R		10 500						μA
I ² t Rating for Fusing (t < 8.3ms) (Note 1)		I ² t	510							A ² s
Typical Junction Capacitance (per element) (Note 2)		Cj	85							pF
Typical Thermal Resistance Junction to Case (Note 3)		R ₀ JC	0.6						°C/W	
Operating and Storage Temperature Range		T _{j,} T _{STG}	-65 to +150						°C	

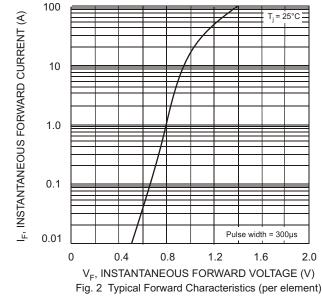
Notes: 1. Non-repetitive, for t > 1ms and < 8.3 ms.

- 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 220 x 220 x 1.6mm aluminum plate heat sink.





T_C, CASE TEMPERATURE (°C) Fig. 1 Forward Current Derating Curve

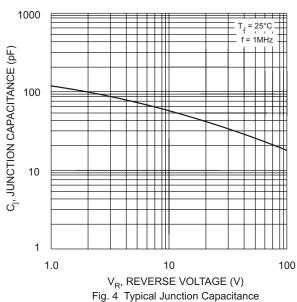


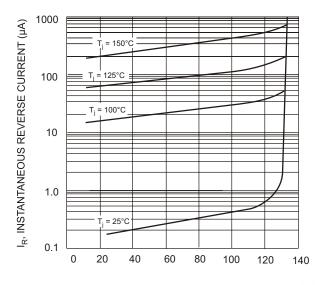
300 Single half-sine-wave (JEDEC method)

T_j = 25°C

1 10 100

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





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