GBJ10005 THRU GBJ1010

SINGLE PHASE 10.0AMP GLASS PASSIVATED BRIDGE RECTIFIER

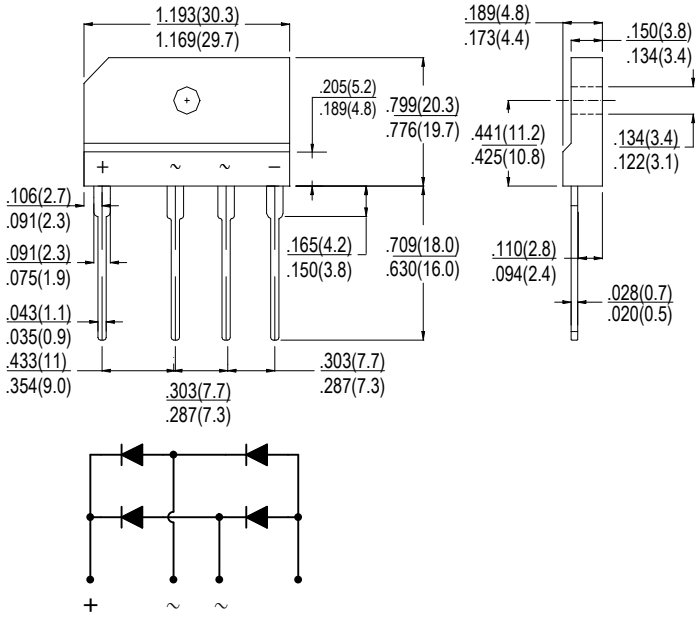
Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: Molded plastic, GBJ
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version

GBJ



dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	GBJ 10005	GBJ 1001	GBJ 1002	GBJ 1004	GBJ 1006	GBJ 1008	GBJ 1010	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@T_C=90℃	IF(AV)	10.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	240							A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	239.04							A^2s
Forward Voltage per element @IF=5A @IF=10A	V_{FM}	1.0 1.1							V
Peak Reverse Current @T_J =25℃ At Rated DC Blocking Voltage @T_J =125℃	I_R	5.0 200							uA
Dielectric Strength	Vids	2500							V
The proposed installation torque Max torque	Tor	5.0 8.0							Kgf.cm
Typical Junction Capacitance (Note 2)	C_J	65							pF
Between junction and ambient, Without heatsink	$R_{\theta JA}$	14							℃/W
Between junction and case, With heatsink	$R_{\theta JC}$	2.3							
Operating and Storage Temperature Range	T_J,T_{STG}	-55to+150							℃

Note: 1. Unit case mounted on aluminum piate heatsink.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C..

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Fig. 1 Output Current Derating Curve

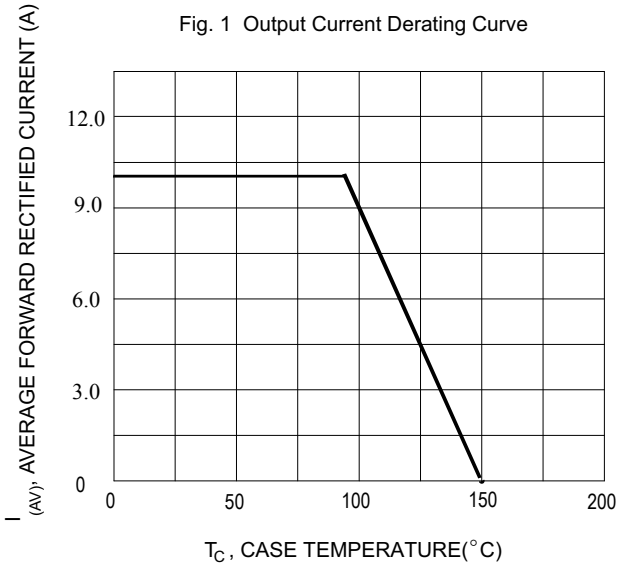


Fig. 2 Typical Forward Characteristics

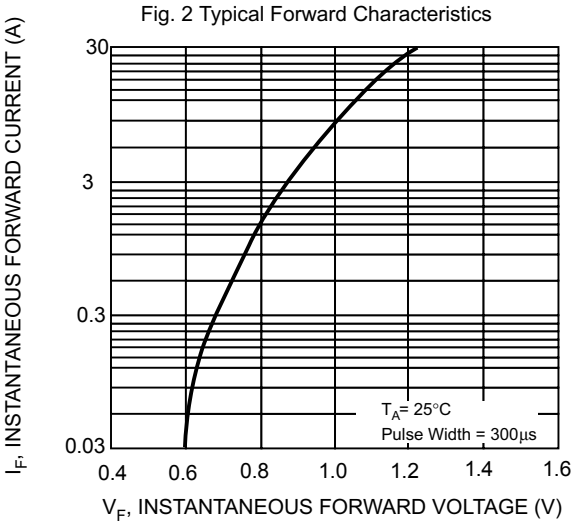


Fig. 3 Maximum Peak Forward Surge Current

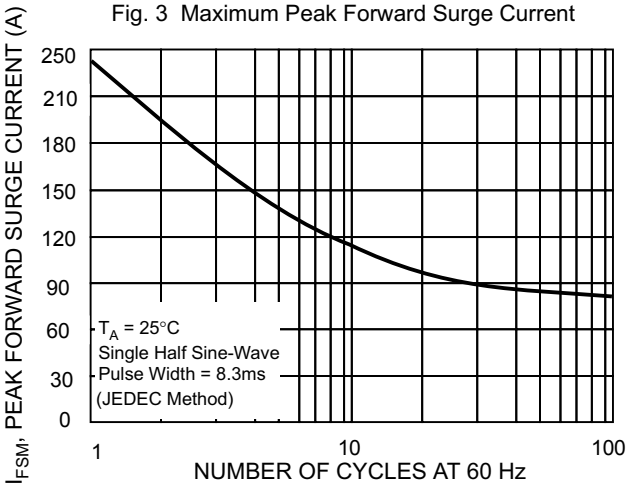


Fig. 4 Typical Junction Capacitance

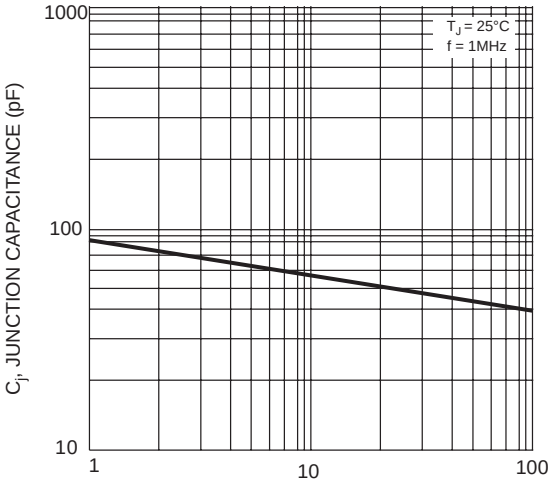
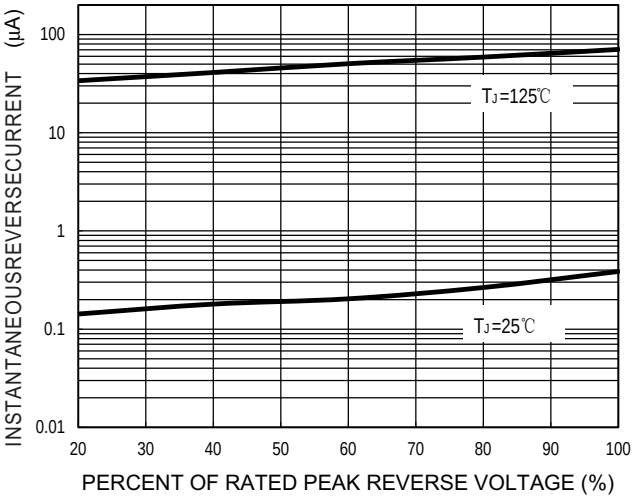


Fig. 5 Typical Reverse Characteristics



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