



# SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER GBJ25005 ~ GBJ2510

## Single Phase Glass Passivated Bridge Rectifier

### Features

- Plastic package has UL flammability Classification 94V-0
- Glass passivated chip junction
- High temperature soldering guaranteed:  
260°C / 10 second, 0.375" (9.5mm) lead length
- High case dielectric strength of 1500 Vrms
- High surge current capability



### Mechanical Data

<b>Case:</b>	Molded plastic body
<b>Technology:</b>	/
<b>Terminals:</b>	Plate lead solderable per MIL-STD-750, method 2026
<b>Mounting torque</b>	6 in-lbs max
<b>Mounting position:</b>	Any (note2)
<b>Weight:</b>	0.26 ounce, 7.4 gram

### Maximum Ratings ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

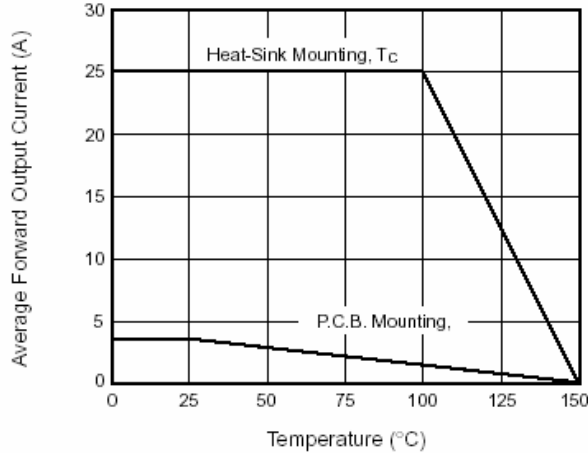
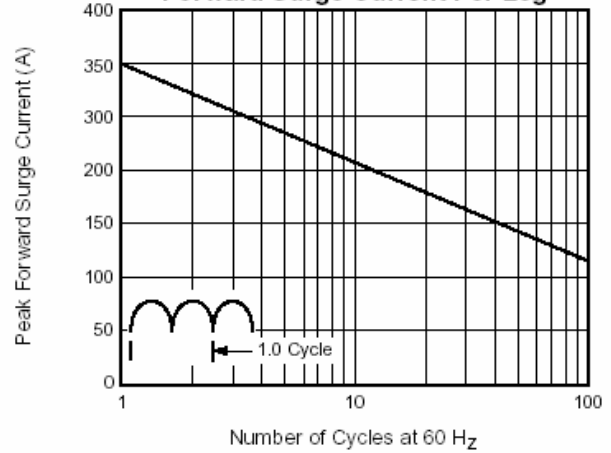
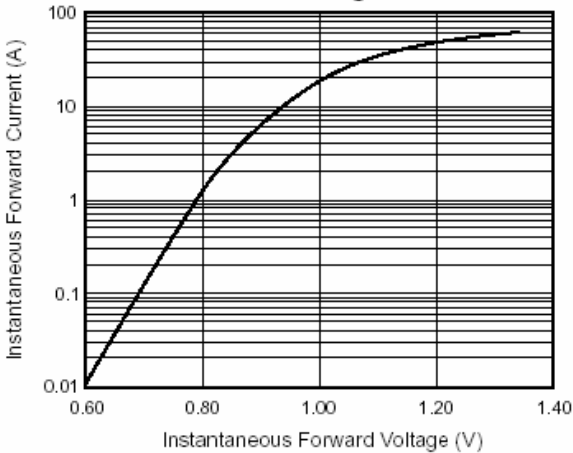
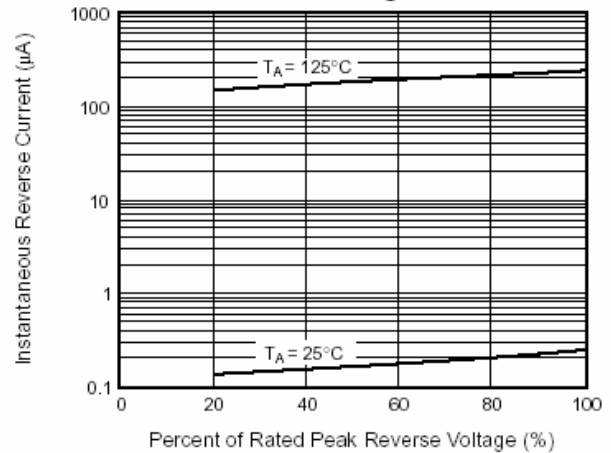
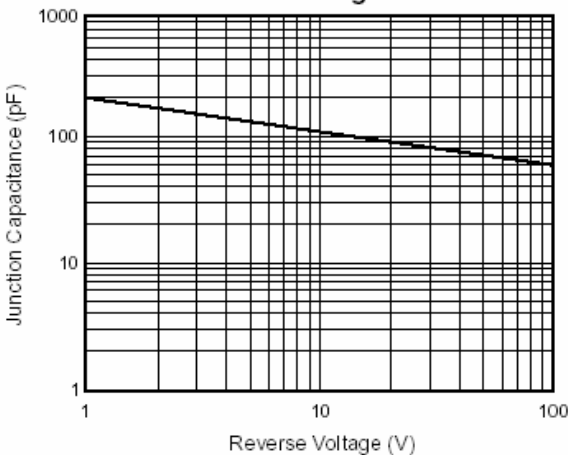
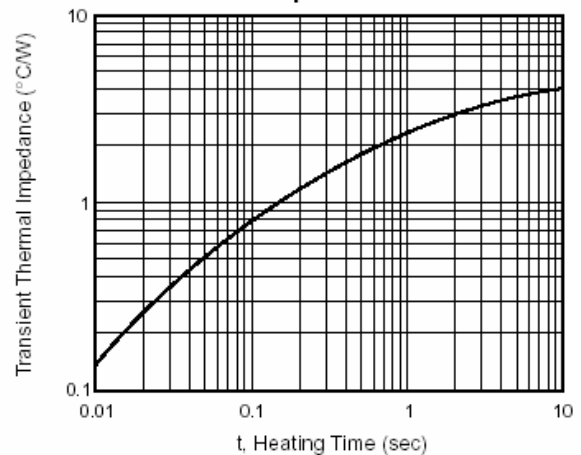
Symbol	Description	GBJ 25005	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	Unit	Conditions
VRRM	Max Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
VRMS	Max RMS Voltage	35	70	140	280	420	560	700	V	
VDC	Max DC Blocking Voltage	50	100	200	400	600	800	1000	V	
I(AV)	Max Average Forward Rectified Current, 0.06"(1.5mm)	25							A	At TC= 100°C
IFSM	Peak Forward Surge Current	350							A	8.3ms single half sine-wave (JEDEC method)
TJ,TSTG	Operating and Storage Temperature Range	-65 to +150							°C	
I2t	Rating for Fusing	570							A2s	T<8.3mS

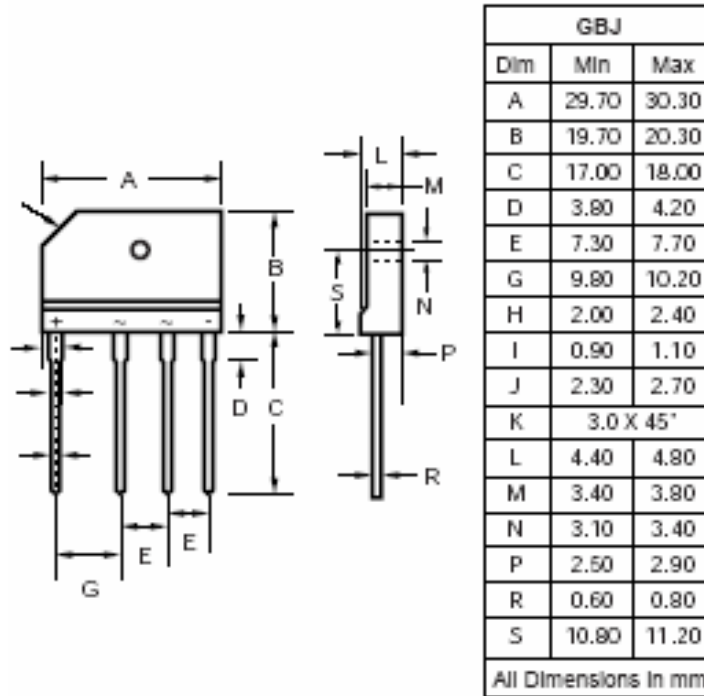
### Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	GBJ 25005	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	Unit	Conditions
VF	Max Instantaneous Forward Voltage	1.0							V	Drop per Bridge element 10.0A
IR	Max DC Reverse Current at Rated DC Blocking Voltage	10							µA	TA=25°C
		500								Tc=125°C
CJ	Typical Junction Capacitance	60							pF	Measured at 1.0MHz/4.0V
Rθ-Ja	Typical Thermal Resistance	1.0							°C/W	Note 1 and Note 2
Viso	Isolation Voltage From case to leads	/							/	/

#### Note:

1. Thermal resistance from junction to case per element. Unit mounted on 220mm x 220mm x 1.6mm aluminum plate heat sink
2. Recommended mounting position is to bolt down on heatsink with silicon thermal compound for maximum heat transfer with #6 screw

**GBJ25005 ~ GBJ2510**
**RATINGS AND CHARACTERISTIC CURVES GBJ25005 THRU GBJ2510**
**Fig. 1 – Derating Curve Output Rectified Current**

**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg**

**Fig. 3 – Typical Forward Characteristics Per Leg**

**Fig. 4 – Typical Reverse Characteristics Per Leg**

**Fig. 5 – Typical Junction Capacitance Per Leg**

**Fig. 6 – Typical Transient Thermal Impedance**


**GBJ25005 ~ GBJ2510**
**Dimensions in inches (mm)**

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