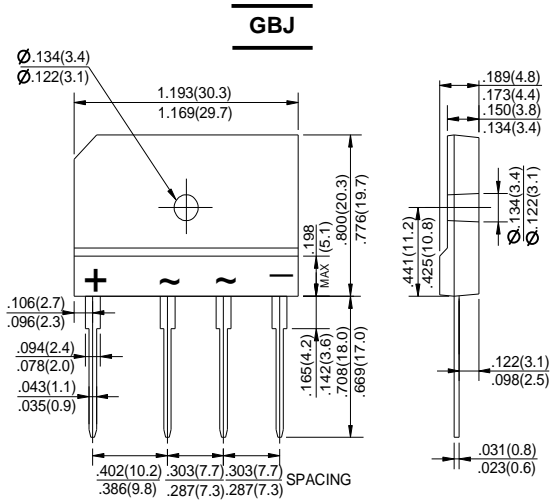


# GBJ25005 THRU GBJ2510

## Glass Passivated Bridge Rectifier

Voltage Range - 50 to 1000 Volts Current - 25.0 Ampere



### FEATURES

- ◆ The plastic material has UL flammability classification 94V-0
- ◆ High surge forward current capability
- ◆ Low forward voltage drop
- ◆ Reliable low cost construction utilizing molded plastic technique results in inexpensive product

### MECHANICAL DATA

Case: Molded plastic body  
 Lead: Solder plated  
 Polarity: As marked

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load derate current by 20%

CHARACTERISTICS	SYMBOL	GBJ 25005	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ Tc=100°C (with heatsink Note 2)	IAV	25.0							A
Maximum Average Forward Rectified Current @ Tc=100°C (without heatsink)	IAV	4.2							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	IFSM	350							A
Maximum Forward Voltage at 12.5A DC	VF	1.1							V
Maximum DC Reverse Current @ Tj=25°C at Rated DC Blocking Voltage @ Tj=125°C	IR	10.0							uA
I <sup>2</sup> t Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	510							A <sup>2</sup> s
Typical Junction Capacitance Per Element (Note1)	CJ	85							pF
Typical Thermal Resistance (Note2)	RJC	0.6							°C/W
Operating Temperature Range	TJ	-55 to +150							°C
Storage Temperature Range	TSTG	-55 to +150							°C

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Device mounted on 300mm\*300mm\*1.6mm cu plate heatsink.

FIG.1-FORWARD CURRENT DERATING CURVE

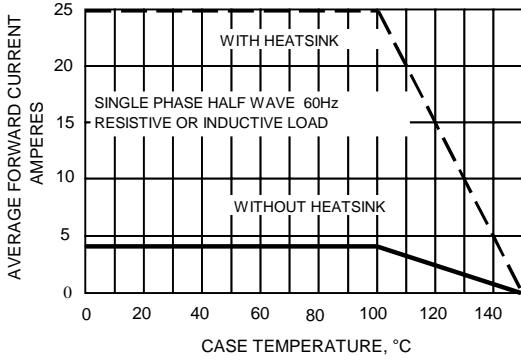


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

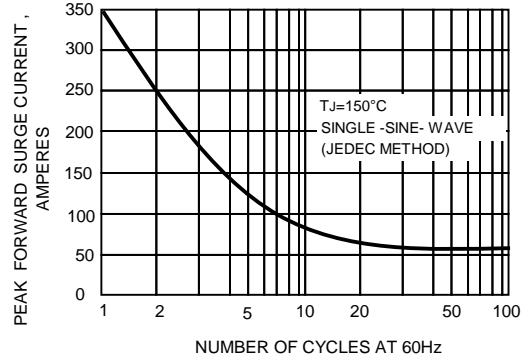


FIG.3-TYPICAL JUNCTION CAPACITANCE

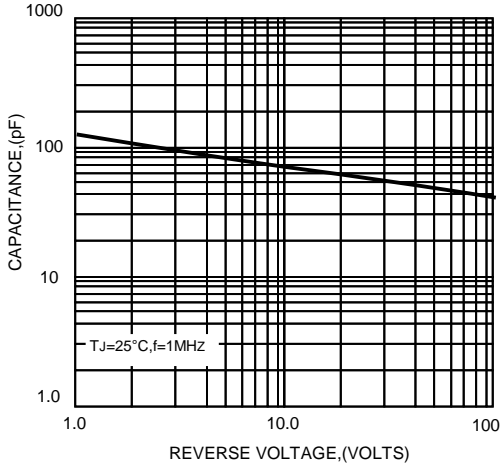


FIG.4-TYPICAL FORWARD CHARACTERISTICS

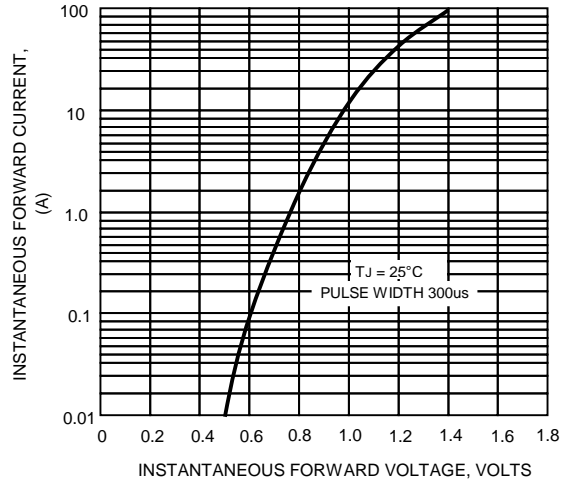


FIG.5-TYPICAL REVERSE CHARACTERISTICS

