



# GBJ35005 THRU GBJ3510

Reverse Voltage - 50 to 1000 Volts Forward Current - 35.0 Amperes

## SILICON BRIDGE RECTIFIERS

### Features

- ◆ Glass Passivated Chip Junction
- ◆ Rating to 1000V PRV
- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic
- ◆ technique Plastic material has U/L lammability classification 94V-0
- ◆ Low forward voltage drop,high current capability



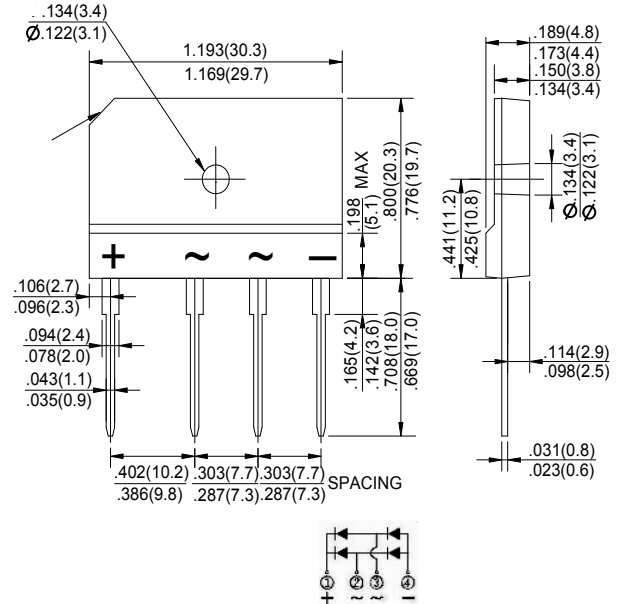
### Mechanical Data

**Case** : JEDEC GBJ Molded plastic body

**Terminals** : Solder plated, solderable per MIL-STD-750,Method 2026

**Polarity** : Polarity symbol marking on body

**Mounting Position** : Any



Dimensions in inches and (millimeters)

### Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	MDD GBJ35005	MDD GBJ3501	MDD GBJ3502	MDD GBJ3504	MDD GBJ3506	MDD GBJ3508	MDD GBJ3510	UNITS	
Marking Code										
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V	
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V	
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V	
Maximum average forward (with heatsink Note 2) Rectified current @ $T_c = 100^\circ\text{C}$ (without heatsink)	$I_{AV}$	35.0				5.0				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$					400				A
Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$					510				$\text{A}^2\text{s}$
Maximum forward voltage at 17.5A DC	$V_F$					1.1				V
Maximum DC reverse current at rated DC blocking voltage	$I_R$					10				$\mu\text{A}$
						0.5				mA
Typical Junction Capacitance (Note 1)	$C_J$					85				pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$					0.6				$^\circ\text{C/W}$
Operating junction temperature range	$T_J$					-55 to +150				$^\circ\text{C}$
storage temperature range	$T_{STG}$					-55 to +150				$^\circ\text{C}$

- 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.  
3. The typical data above is for reference only.



## Ratings And Characteristic Curves

FIG.1-FORWARD CURRENT DERATING CURVE

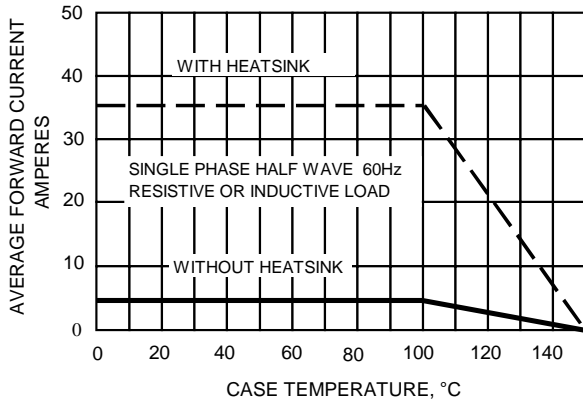


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

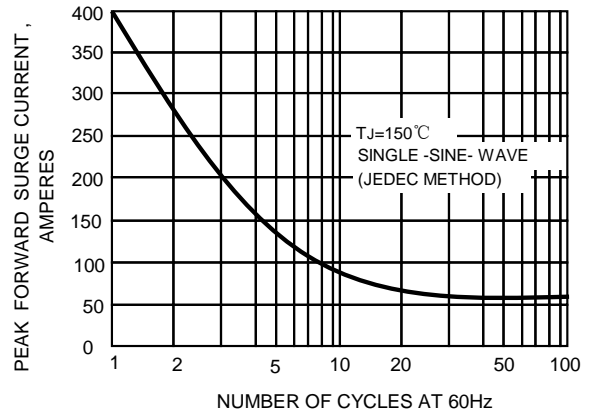


FIG.3-TYPICAL REVERSE CHARACTERISTICS

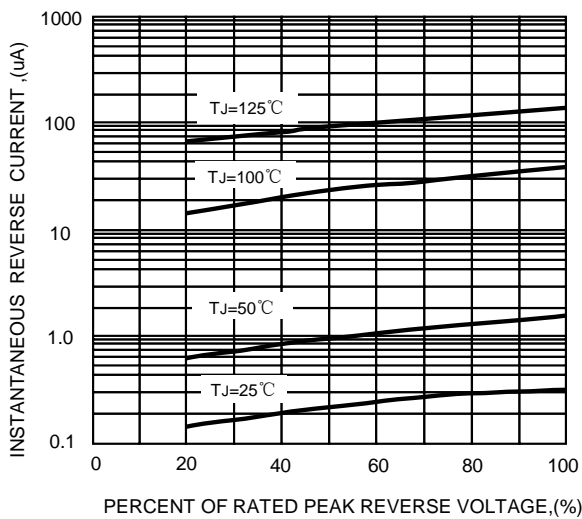
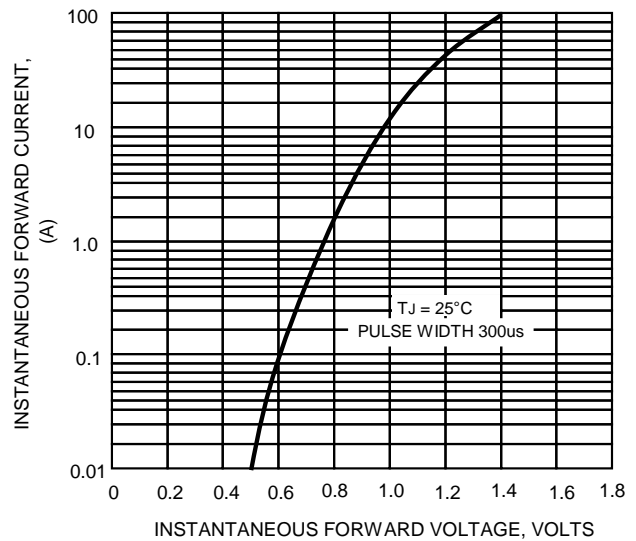


FIG.4-TYPICAL FORWARD CHARACTERISTICS



The curve above is for reference only.