



# GBJ35005 THRU GBJ3510

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

## SILICON BRIDGE RECTIFIERS

### Features

- ◆ 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



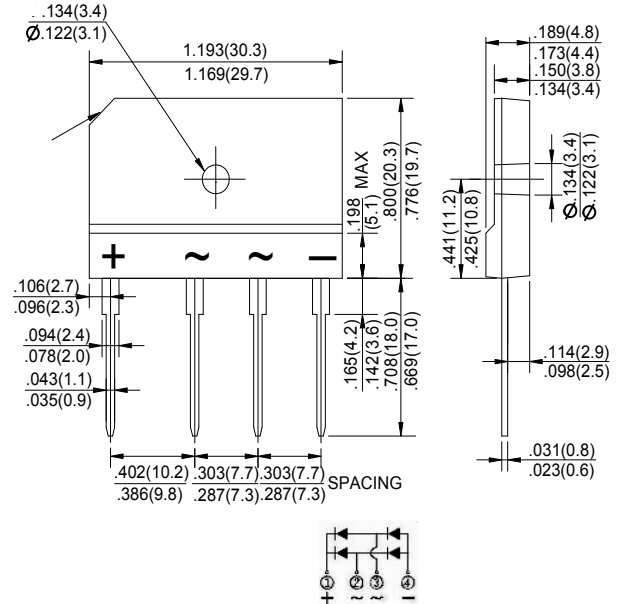
### Mechanical Data

**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	MDD	MDD	MDD	MDD	MDD	MDD	UNITS
		GBJ35005	GBJ3501	GBJ3502	GBJ3504	GBJ3506	GBJ3508	GBJ3510	
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				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				A <sup>2</sup> s
Maximum forward voltage at 17.5A DC	$V_F$				1.1				V
Maximum DC reverse current at rated DC blocking voltage $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	$I_R$				10				$\mu\text{A}$
Typical Junction Capacitance (Note 1)	$C_J$				85				pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$				0.6				$^\circ\text{C}/\text{W}$
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 75mm\*75mm\*1.6mm Cu plate heatsink.  
3. The typical data above is for reference only.



## Ratings And Characteristic Curves

FIG.1-FORWARD CURRENT DERATING CURVE

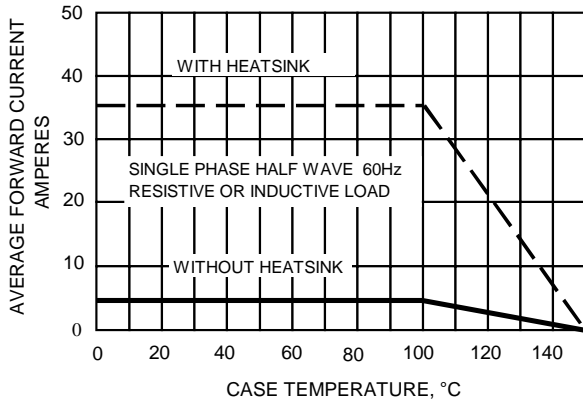


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

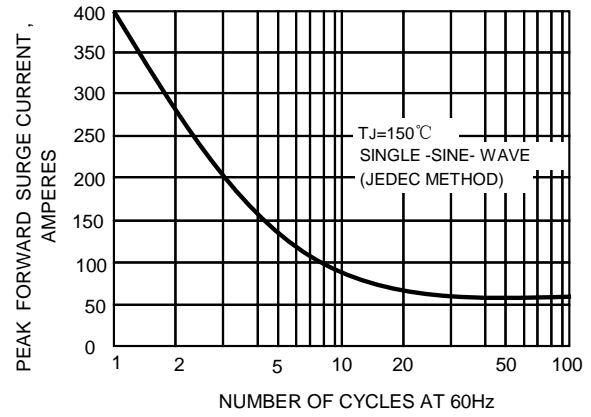


FIG.3-TYPICAL REVERSE CHARACTERISTICS

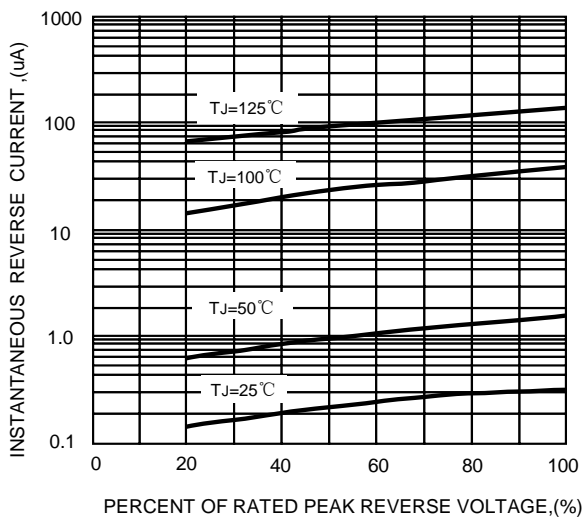
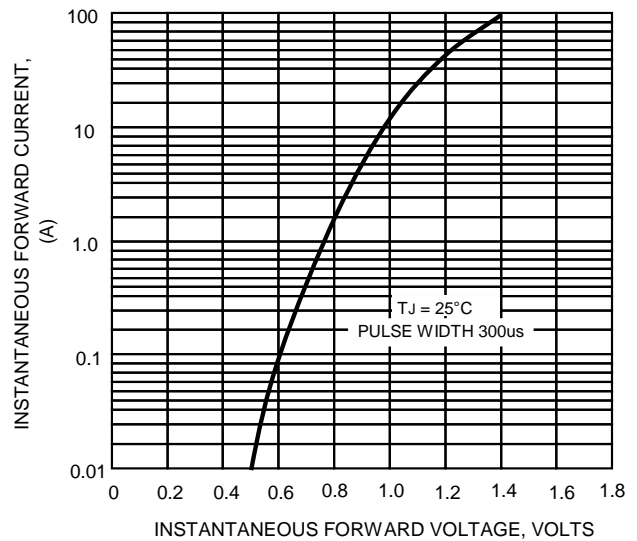


FIG.4-TYPICAL FORWARD CHARACTERISTICS



The curve above is for reference only.