

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

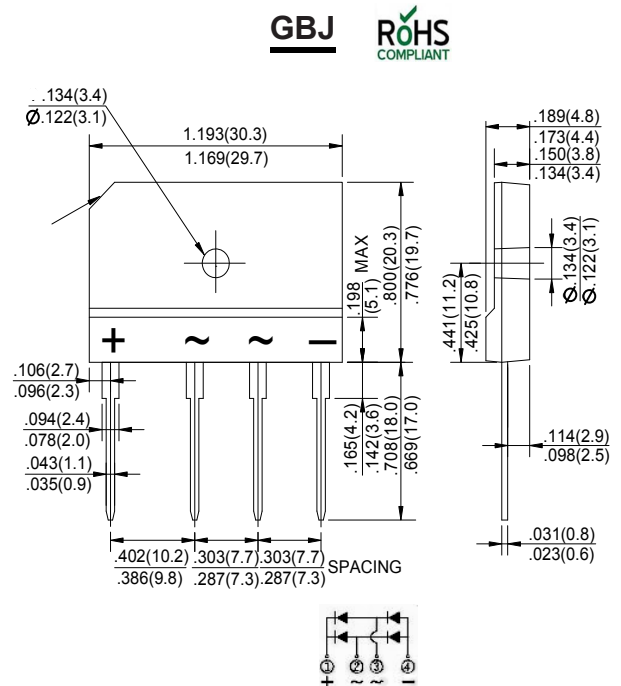
Case : JEDEC GBJ Molded plastic body

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

Polarity : Polarity symbol marking on body

Mounting Position : Any

Mounting Torque: 5in-lbs



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 ² s
Maximum forward voltage at 17.5A DC	V_F				1.1				V
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 125^\circ\text{C}$	I_R				10				μA
					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

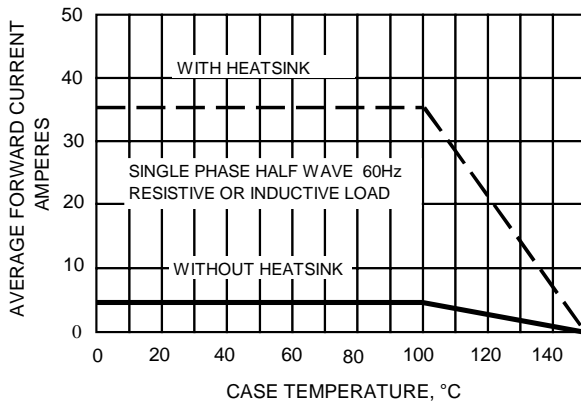


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

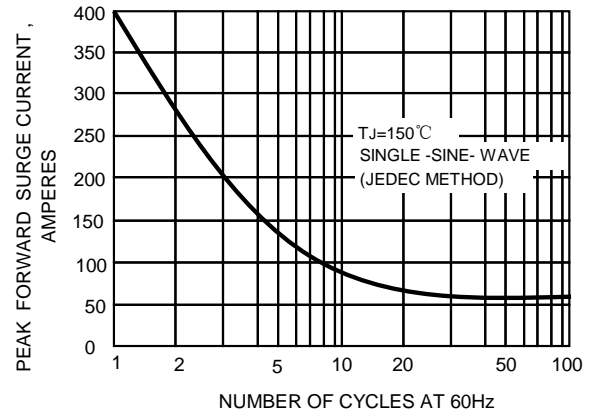


FIG.3-TYPICAL REVERSE CHARACTERISTICS

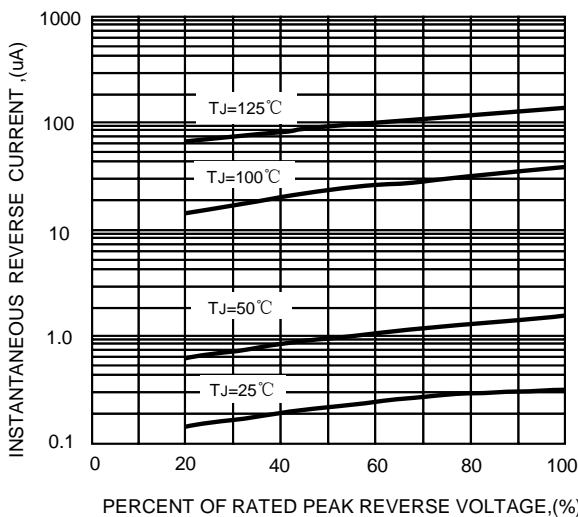
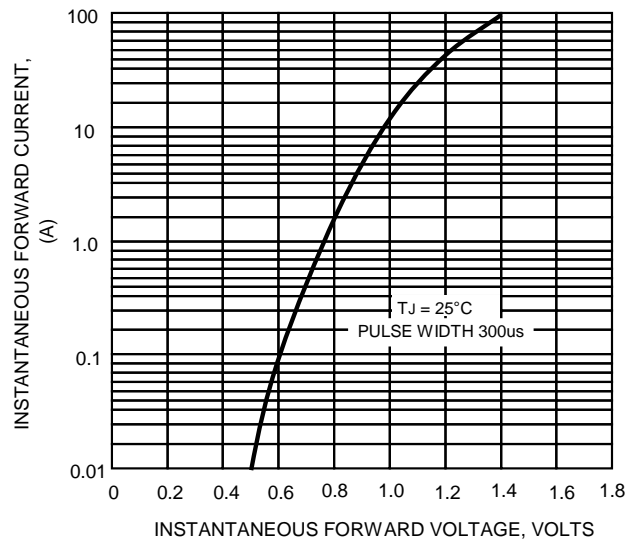


FIG.4-TYPICAL FORWARD CHARACTERISTICS



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