

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



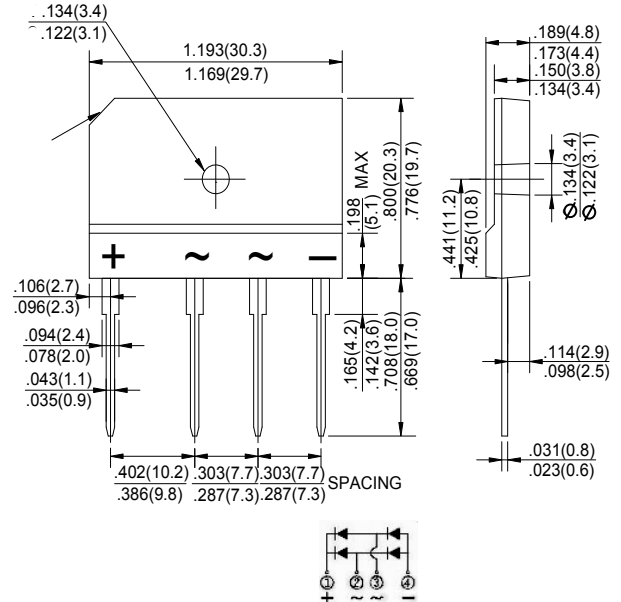
Mechanical Data

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
		GBJ5\$005	GBJ5\$5%	GBJ5\$5&	GBJ5\$5{(GBJ5\$5{*	GBJ5\$5\$,	GBJ50%	
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 @ $T_c = 100^\circ C$ (without heatsink)	$I_{(AV)}$	50.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	400							A
Rating for Fusing ($t < 8.3ms$)	I^2t	664							A ² s
Maximum forward voltage at 5A DC	V_F	1.1							V
Maximum DC reverse current at rated DC blocking voltage $T_A = 25^\circ C$ $T_A = 125^\circ C$	I_R	10							μA
		0.5							mA
Typical Junction Capacitance (Note 1)	C_J	85							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	0.6							$^\circ C/W$
Operating junction temperature range	T_J	-55 to +150							$^\circ C$
storage temperature range	T_{STG}	-55 to +150							$^\circ C$

- 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

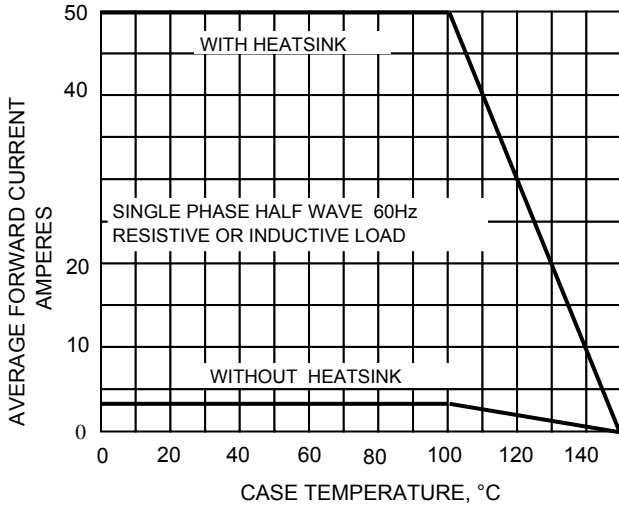


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

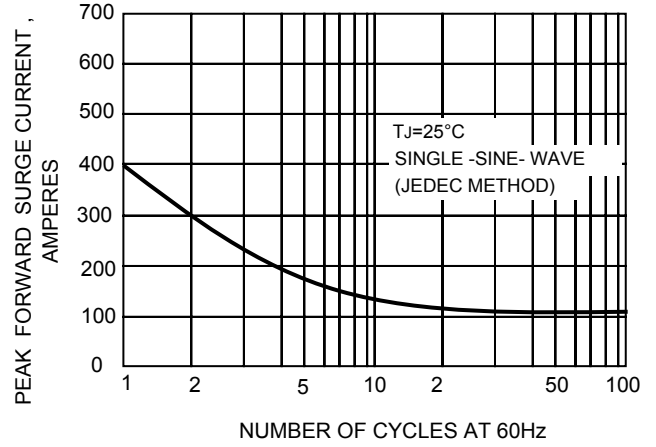


FIG.3-TYPICAL FORWARD CHARACTERISTICS

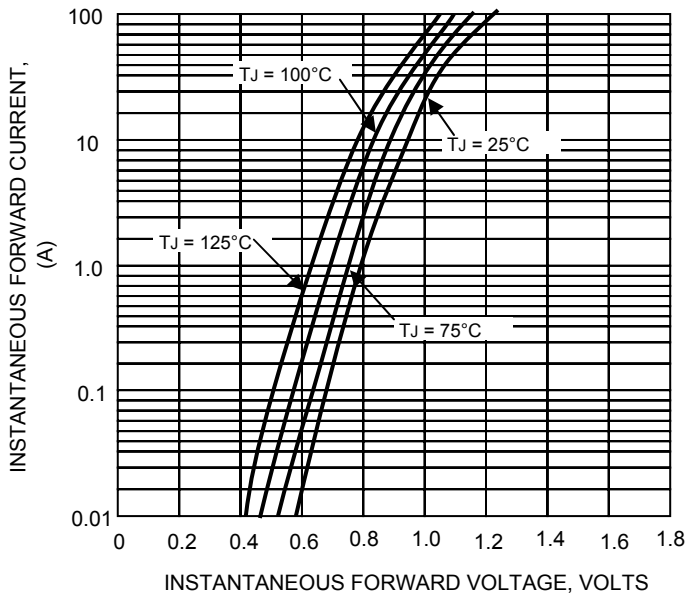
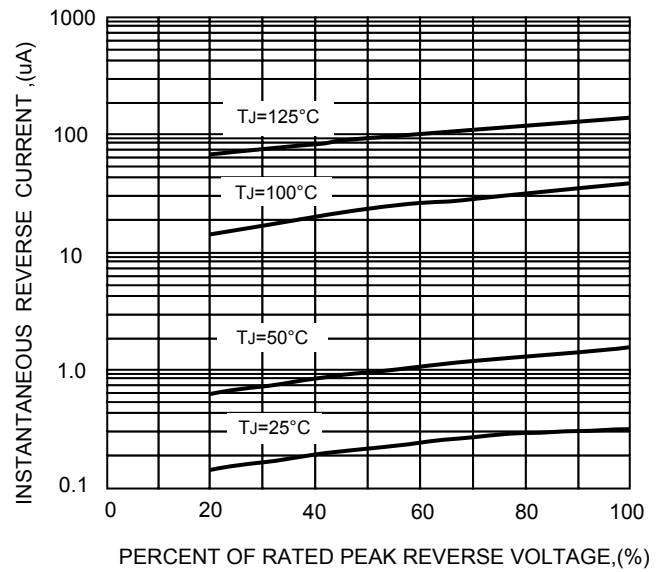


FIG.5-TYPICAL REVERSE CHARACTERISTICS



The curve above is for reference only.