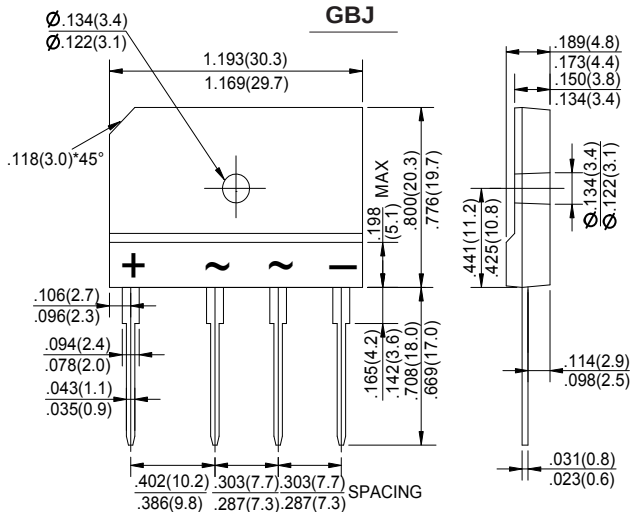




GBJ15005 THRU GBJ1510

SILICON BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 15.0 Amperes



Dimensions in inches and (milimeters)

FEATURES

- ◆ Rating to 1000V PRV
- ◆ Ideal for printed circuit board
- ◆ Low forward voltage drop, high current capability
- ◆ Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- ◆ The plastic material has U/L flammability classification 94V-0

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%.

TWGMC Catalog Number	SYMBOLS	GBJ 15005	GBJ 1501	GBJ 1502	GBJ 1504	GBJ 1506	GBJ 1508	GBJ 1510	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum Average Forward (with heatsink Note 2) Rectified Current @ $T_C = 100^\circ\text{C}$ (without heatsink)	I_{AV}	15.0 3.7							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	240							Amps
Maximum instantaneous forward voltage drop per bridge element at 7.5A	V_F	1.0							Volts
Maximum DC reverse current $T_J = 25^\circ\text{C}$ at rated DC blocking voltage $T_J = 125^\circ\text{C}$	I_R	10 0.5							μA mA
It Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	240							A^2s
Typical Junction Capacitance (Note 1)	C_J	60							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	0.8							$^\circ\text{C}/\text{W}$
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 (典型值仅供参考).

RATINGS AND CHARACTERISTIC CURVES GBJ15005 THRU GBJ1510

FIG.1-FORWARD CURRENT DERATING CURVE

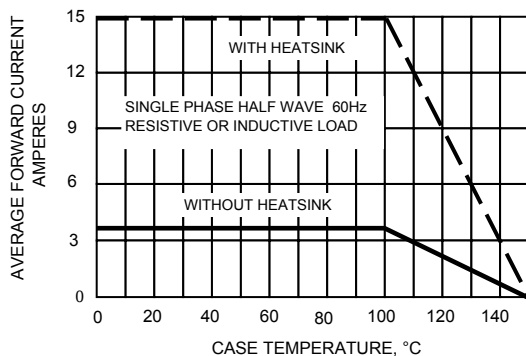


FIG.2-MAXMUN NON-REPETITIVE
SURGE CURRENT

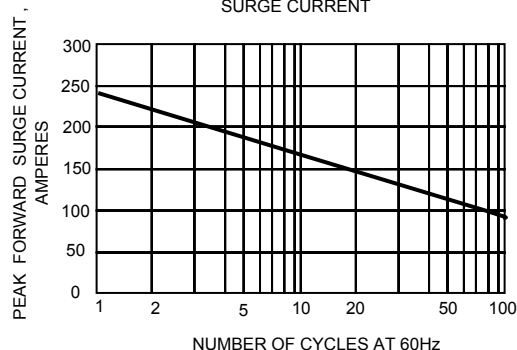


FIG.3-TYPICAL JUNCTION CAPACITANCE

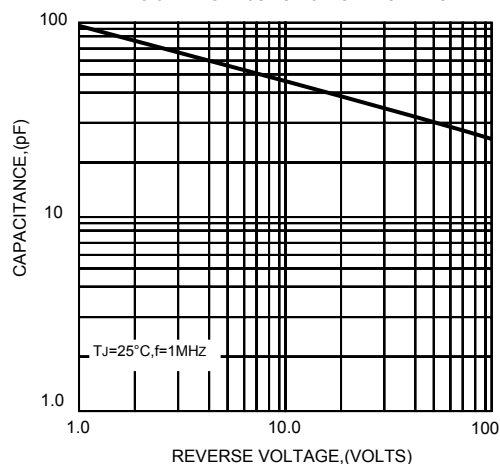


FIG.4-TYPICAL FORWARD CHARACTERISTICS

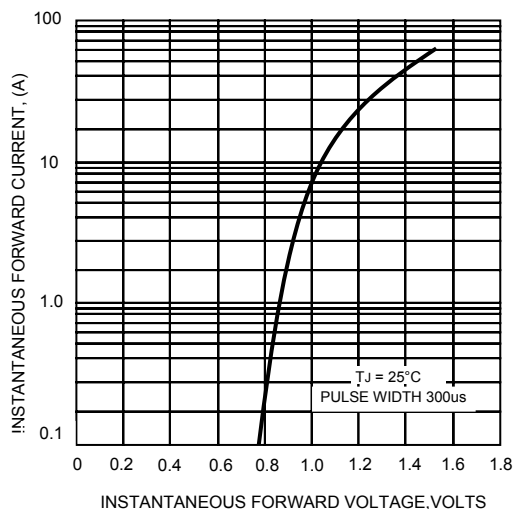
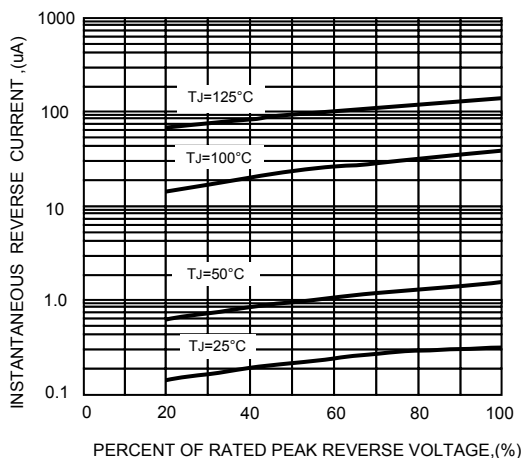


FIG.5-TYPICAL REVERSE CHARACTERISTICS



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!