



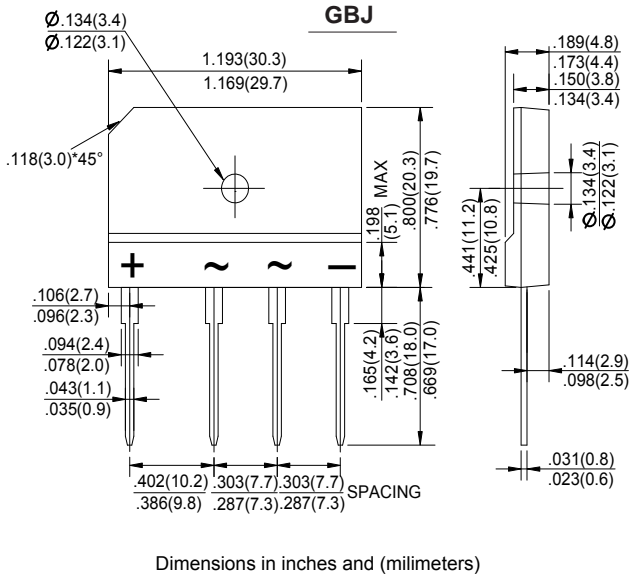
# GBJ50005 THRU GBJ5010

## SILICON BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 50.0 Amperes

### 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%.

MDD Catalog Number	SYMBOLS	GBJ 50005	GBJ 5001	GBJ 5002	GBJ 5004	GBJ 5006	GBJ 5008	GBJ 5010	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 Rectified Current @ $T_C = 100^\circ C$ (with heatsink Note 2) (without heatsink)	$I_{(AV)}$	50.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	350							Amps
Maximum instantaneous forward voltage drop per bridge element at 25A	$V_F$	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage	$I_R$	10							$\mu A$
$T_A = 25^\circ C$ $T_A = 125^\circ C$		0.5							mA
It Rating for Fusing ( $t < 8.3ms$ )	$I^2 t$	510							$A^2 s$
Typical Junction Capacitance (Note 1)	$C_J$	85							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	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 (典型值仅供参考).



# RATINGS AND CHARACTERISTIC CURVES GBJ50005 THRU GBJ5010

FIG.1-FORWARD CURRENT DERATING CURVE

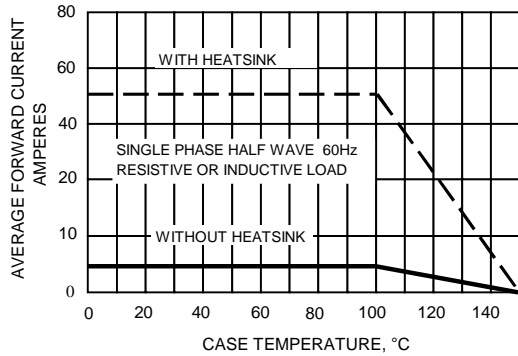


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

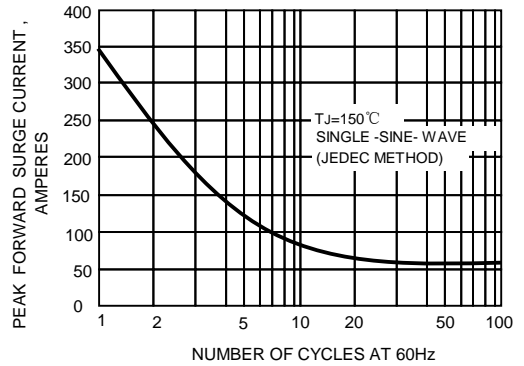


FIG.3-TYPICAL REVERSE CHARACTERISTICS

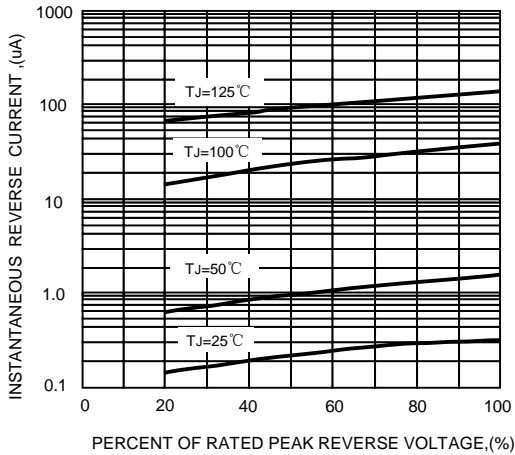
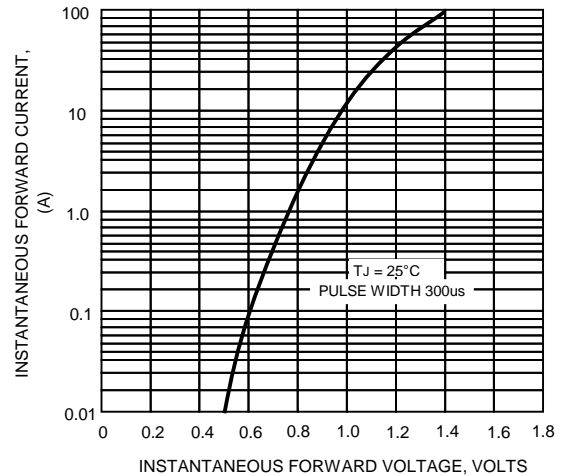


FIG.4-TYPICAL FORWARD CHARACTERISTICS



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



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Bridge Rectifiers](#) category:*

*Click to view products by [Microdiode Electronics](#) manufacturer:*

Other Similar products are found below :

[MB252](#) [MB356G](#) [MB358G](#) [MP358-BP](#) [90MT160KPBF](#) [GBJ1504-BP](#) [GBU10B-BP](#) [GBU15J-BP](#) [GBU15K-BP](#) [GBU4A-BP](#) [GBU4D-BP](#)  
[GSIB680-E3/45](#) [DB101-BP](#) [DBA150G](#) [DBA250G](#) [DBD10G-TM-E](#) [DBF10G](#) [DBG150G](#) [DBG250G](#) [DF01](#) [DF10SA-E345](#) [BU1508-E3/45](#)  
[BU1510-E3/45](#) [KBPC50-10S](#) [RS405GL-BP](#) [26MT120](#) [G5SBA60-E3/51](#) [GBJ1502-BP](#) [GBU10J-BP](#) [GBU4J-BP](#) [GBU6M](#) [GBU8D-BP](#)  
[GBU8J-BP](#) [GSIB1520-E3/45](#) [TB102M](#) [MB1510](#) [MB6M-G](#) [MB86](#) [TL401G](#) [MDA920A2](#) [TU602](#) [TU810](#) [MP501W-BP](#) [MP502-BP](#)  
[BR1005-BP](#) [BR101-BP](#) [BR84DTP204](#) [BU1010A-E3/51](#) [BU1508-E3/51](#) [BU2006-E3/45](#)