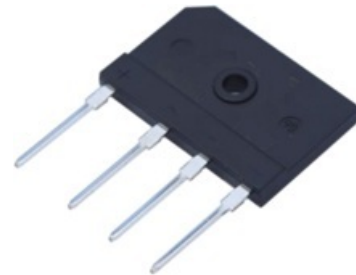


### 10A Single Phase Bridge Rectifier

#### Features

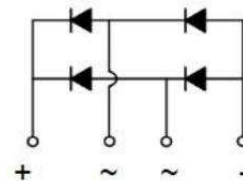
- Ideal for printed circuit boards
- High surge current capability
- Reverse Voltage : 50 to 1000V
- Forward Current : 10A
- High temperature soldering : 260 °C/10s at terminals



GBJ

#### Applications

- Single phase rectifiers for power supplies
- Industrial automation equipment
- Input rectifiers for inverter



#### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbol	GBJ 10005	GBJ 1001	GBJ 1002	GBJ 1004	GBJ 1006	GBJ 1008	GBJ 1010	Unit
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 Rectified Current @ $T_c=100^{\circ}C$	with heatsink (Note 1)	10							A
	without heatsink	2.5							
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load(JEDEC method)	$I_{FSM}$	200							A
Maximum Instantaneous Forward Voltage @5.0A	$V_F$	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^{\circ}C$	10							$\mu A$
	$T_A=125^{\circ}C$	500							
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	2.3							$^{\circ}C/W$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	(-55 to +150)							$^{\circ}C$

#### Notes:

1. Device mounted on 300mm\*300mm\*1.6mm cu plate heatsink.

### Ratings and Characteristic Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)

FIG.1 - Typical forward current derating curve

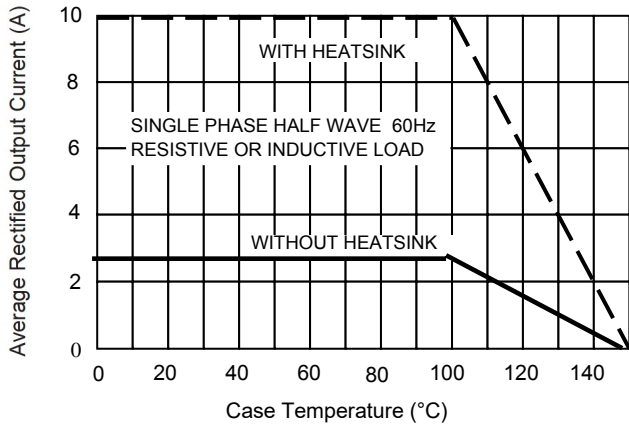


FIG.2 - Maximum Non-Repetitive Peak Forward Surge Current

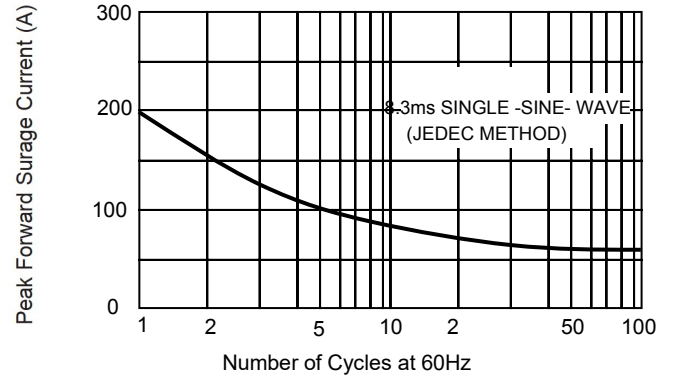


FIG.3 - Typical Junction Capacitance

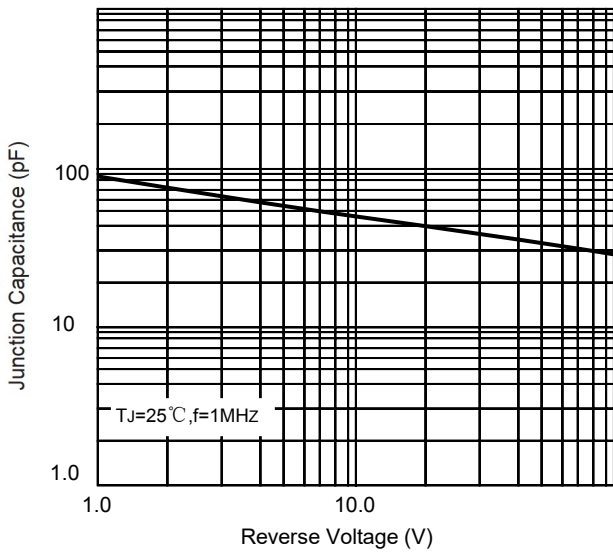


FIG.4 - Typical Instantaneous Forward Characteristics

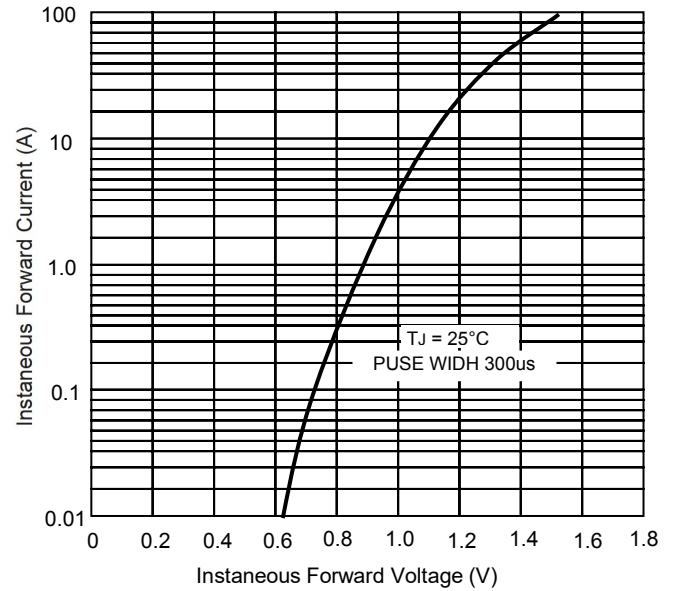
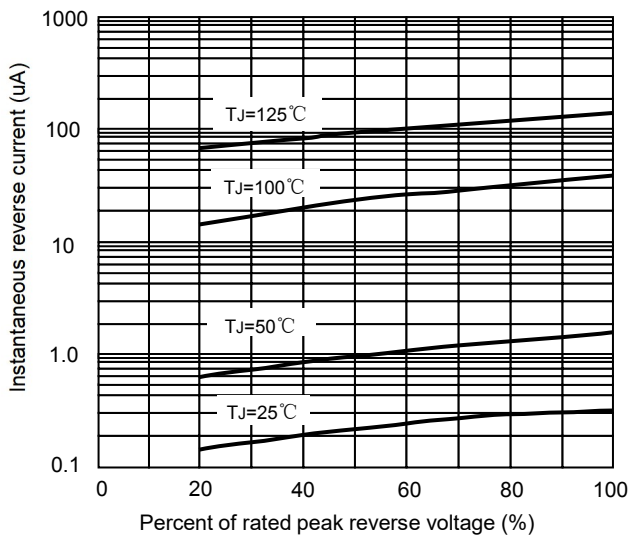
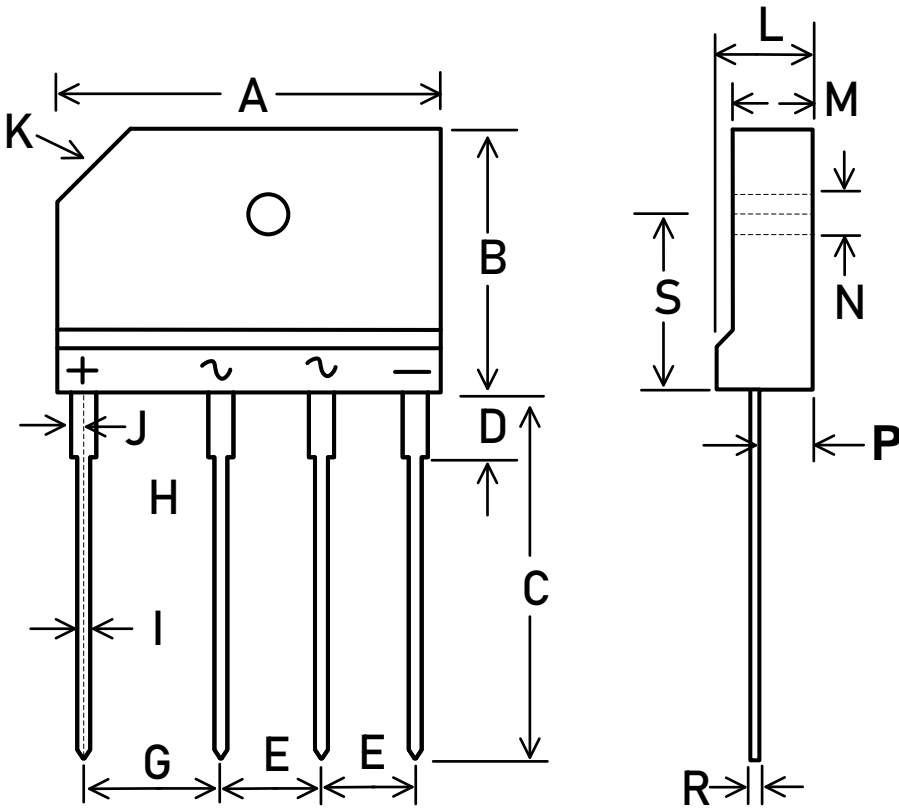


FIG.5 - Typical reverse Characteristics



**Package Outlines** (Dimensions in mm)

Plastic surface mounted package(GBJ)



Symbol	Millimeter	
	Min.	Max.
A	29.70	30.3
B	19.70	20.3
C	17.00	18.00
D	3.80	4.20
E	7.30	7.70
G	9.80	10.20
H	2.00	2.40
I	0.90	1.10
J	2.30	2.70
K	3.0x45°	
L	4.40	4.80
M	3.40	3.80
N	3.10	3.40
P	2.50	2.90
R	0.60	0.80
S	10.80	11.20

**\*Important Usage Information and Disclaimer**

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