



## GBJ10005 THRU GBJ1010

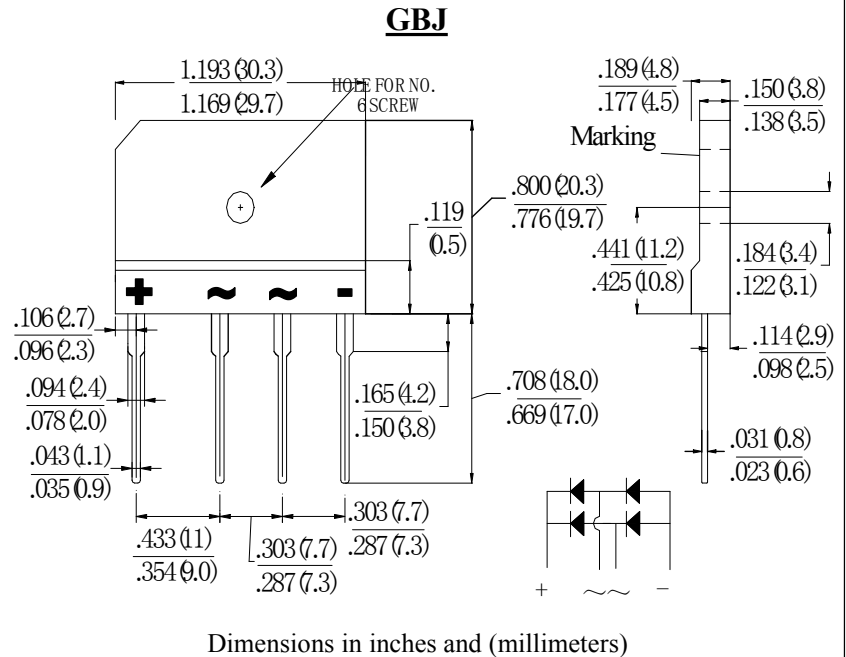
**PINGWEI ENTERPRISE SINGLE PHASE 10.0 AMPS. GLASS PASSIVATED BRIDGE RECTIFIERS**

### FEATURE

- . UL Listed Under Recognized Component Index, File Number E338195
- . Glass passivated chip junctions
- . High case dielectric strength
- . Low Reverse Leakage Current
- . High surge current capability
- . Ideal for Printed Circuit Board Applications

### MECHANICAL DATA

- . Case: GBJ
- . Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0
- . Terminals: Pure tin plated, Lead free.
- Leads solderable per MIL-STD-750, Method 2026.
- . Polarity: Molded on Body
- . Mounting: Through Hole for #6 Screw
- . Mounting Torque: 5.0 in-lbs Maximum
- . Weight: 6.6 grams



### 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, derate current by 20%

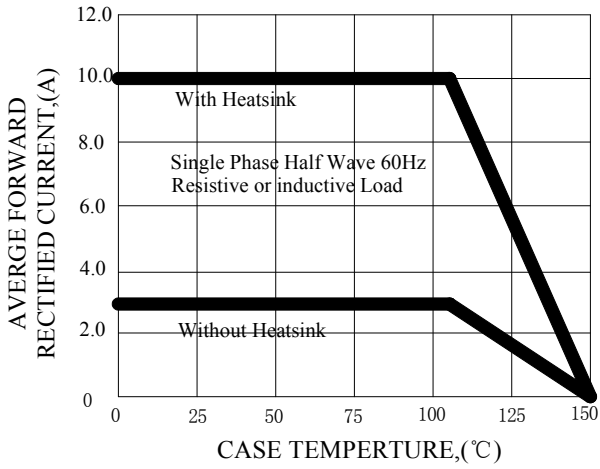
Type Number	SYM BOL	GBJ 10005	GBJ 1001	GBJ 1002	GBJ 1004	GBJ 1006	GBJ 1008	GBJ 1010	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note2) Rectified Current @ $T_C=110^\circ\text{C}$ (without heatsink)	$I_{F(AV)}$	10.0 3.0						A	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$	220						A	
Maximum Forward Voltage @10.0A DC Drop per element @ 5.0A DC	$V_F$	1.1 1.05						V	
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ at rated DC blocking voltage @ $T_J=125^\circ\text{C}$	$I_R$	10.0 500.0						$\mu\text{A}$	
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	200						$\text{A}^2\text{Sec}$	
Typical Junction Capacitance (Note 1)	$C_J$	70						pF	
Typical Thermal Resistance (Note 2)	$R_{(JC)}$	1.4						$^\circ\text{C}/\text{W}$	
Storage Temperature	$T_{STG}$	-55 to +150						$^\circ\text{C}$	
Operating Junction Temperature	$T_J$	-55 to +150						$^\circ\text{C}$	

#### Note:

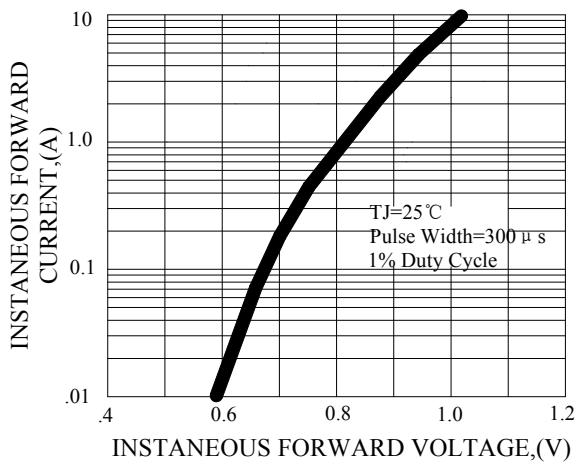
1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Device mounted on 150mm x 150mm x 1.6mm Cu Plate Heatsink.

**RATING AND CHARACTERISTIC CURVES (GBJ10005 THRU GBJ1010)**

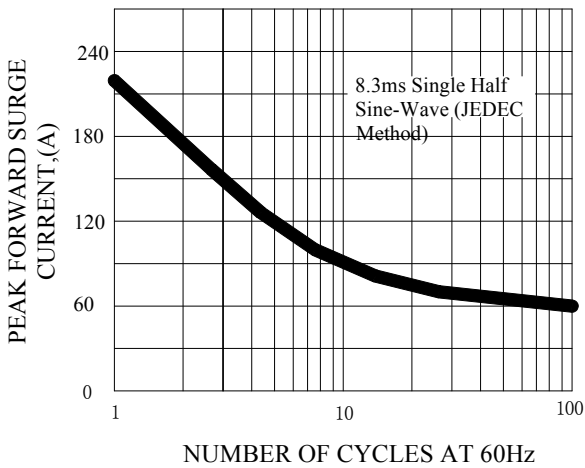
**FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE**



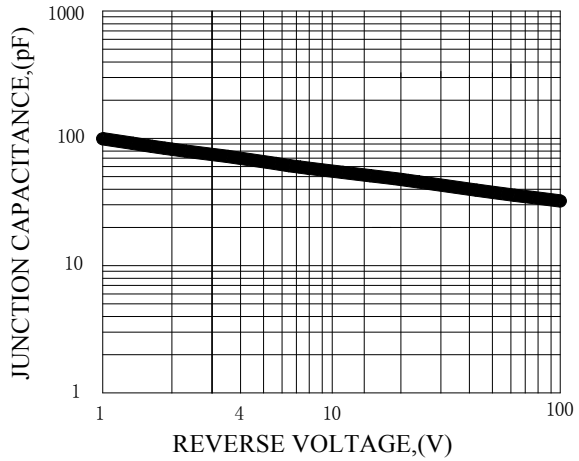
**FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG.4-TYPICAL JUNCTION CAPACITANCE**



**FIG.5-TYPICAL REVERSE CHARACTERISTICS**

