

# GBJ10005 THRU GBJ1010

SINGLE PHASE 10.0 AMP BRIDGE RECTIFIERS



## FEATURES

- \* Ideal for printed circuit board
- \* Low forward voltage
- \* Low leakage current
- \* Mounting position: Any

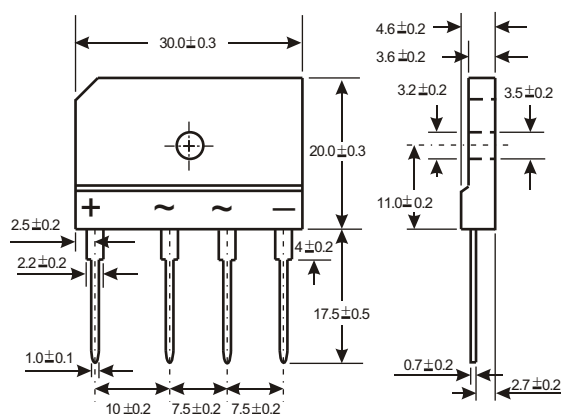
## VOLTAGE RANGE

50 to 1000 Volts

## CURRENT

10.0 Amperes

### GBJ



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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	GBJ10005	GBJ1001	GBJ1002	GBJ1004	GBJ1006	GBJ1008	GBJ1010	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2)	10.0							A
Rectified Current at T <sub>c</sub> =110°C (Without heatsink)	3.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	200							A
Maximum Forward Voltage Drop per Bridge Element at 5.0A D.C.	1.05							V
Maximum DC Reverse Current Ta=25°C	5.0							μA
at Rated DC Blocking Voltage Ta=100°C	500							μA
Typical Thermal Resistance R <sub>jc</sub> (Note 1)	2.3							°C/W
Typical Thermal Resistance R <sub>jl</sub> (Note 2)	6.0							°C/W
Operating Temperature Range, T <sub>j</sub>	-55 — +150							°C
Storage Temperature Range, T <sub>stg</sub>	-55 — +150							°C

### NOTES:

1. Thermal Resistance from Junction to Case with device mounted on 100mm x 100mm x 1.6mm Cu Plate Heatsink.
2. Thermal Resistance from Junction to Lead without Heatsink.

# RATING AND CHARACTERISTIC CURVES (GBJ10005 THRU GBJ1010)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

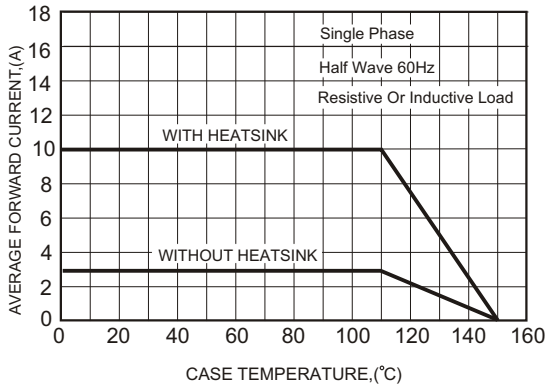


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

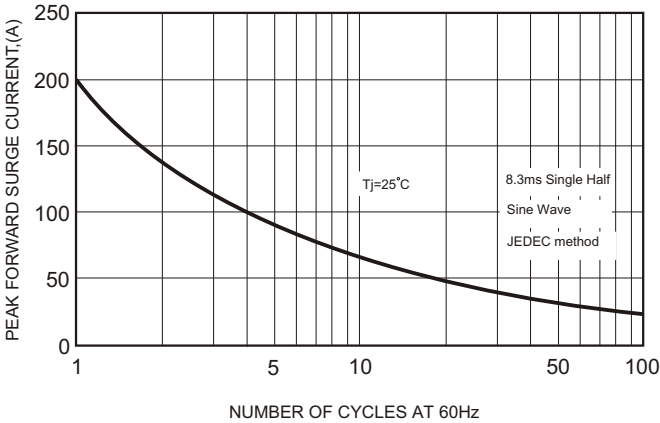


FIG.3-TYPICAL FORWARD CHARACTERISTICS

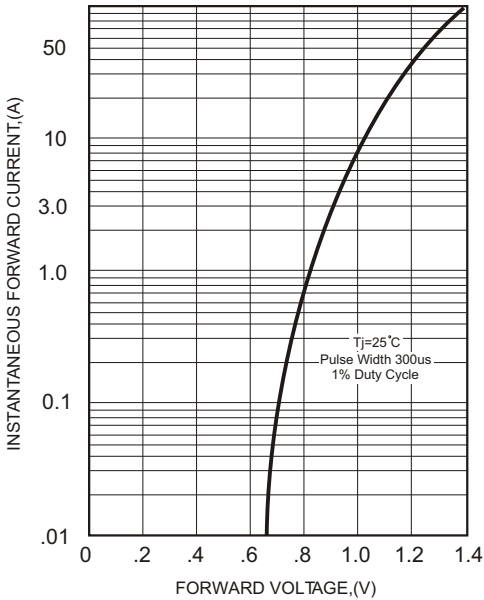


FIG.4-TYPICAL REVERSE CHARACTERISTICS

