

# GBJ1001 THRU GBJ1007



SINGLE PHASE 10.0 AMP BRIDGE RECTIFIERS



## FEATURES

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

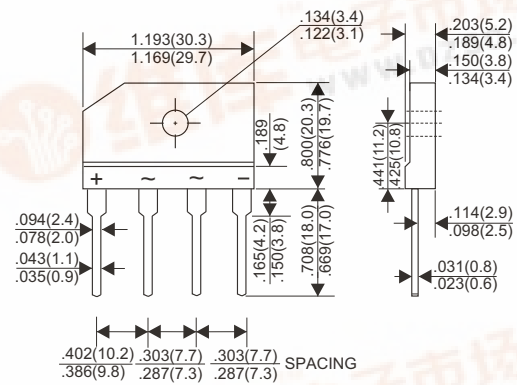
## VOLTAGE RANGE

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	GBJ1001	GBJ1002	GBJ1003	GBJ1004	GBJ1005	GBJ1006	GBJ1007	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 Tc=110°C (Without heatsink)								3.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								170	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	A
at Rated DC Blocking Voltage Ta=100°C								500	A
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 (GBJ1001 THRU GBJ1007)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

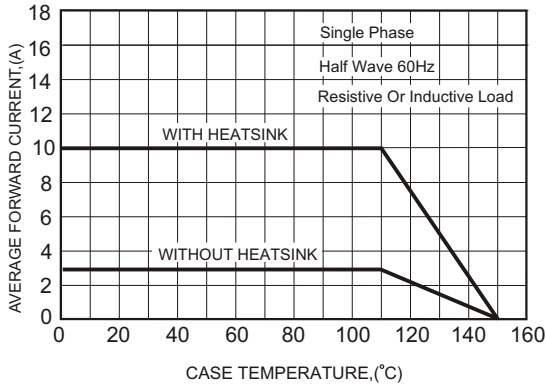


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

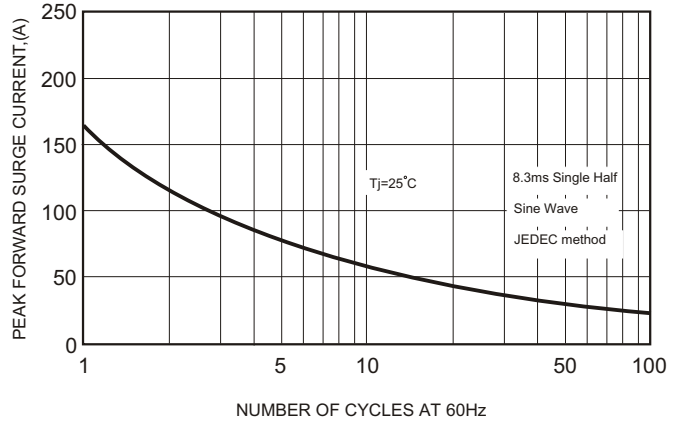


FIG.3-TYPICAL FORWARD CHARACTERISTICS

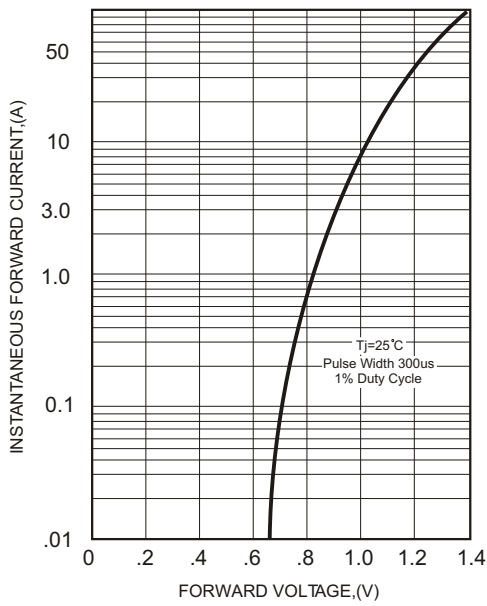


FIG.4-TYPICAL REVERSE CHARACTERISTICS

