

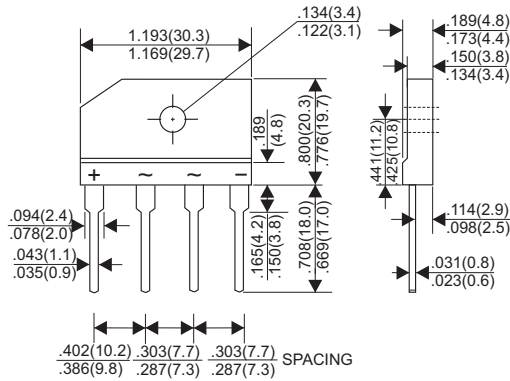


# GBJ1501 THRU GBJ1507

## SINGLE PHASE BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts    Forward Current - 15.0 Ampere

GBJ



Dimensions in inches and (millimeters)

## FEATURES

- \* Glass Passivated Die Construction
- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability

## MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any

## 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	GBJ1501	GBJ1502	GBJ1503	GBJ1504	GBJ1505	GBJ1506	GBJ1507	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)								15.0	A
Rectified Current at T <sub>c</sub> =110°C (Without heatsink)								3.2	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								240	A
Maximum Forward Voltage Drop per Bridge Element at 7.5A D.C.								1.1	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>θjc</sub> (Note 1)								2.3	°C/W
Typical Thermal Resistance R <sub>θjL</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 (GBJ1501 THRU GBJ1507)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

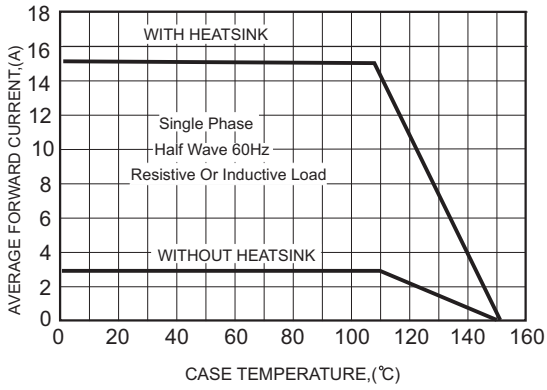


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

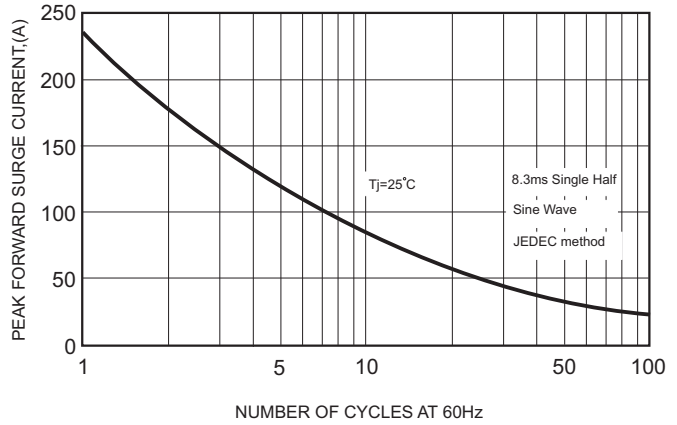


FIG.3-TYPICAL FORWARD CHARACTERISTICS

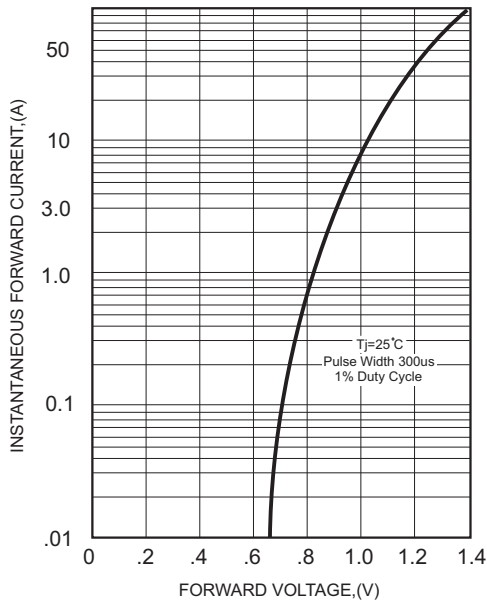


FIG.4-TYPICAL REVERSE CHARACTERISTICS

