

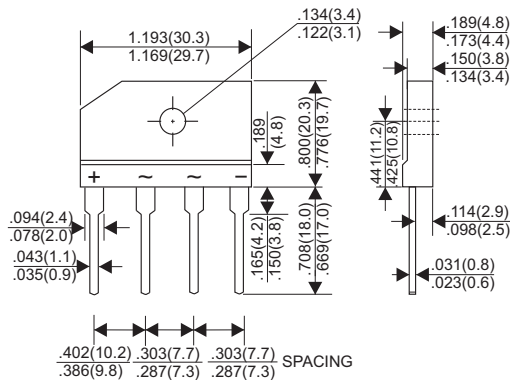


# GBJ601 THRU GBJ607

## SINGLE PHASE BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 6.0 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	GBJ601	GBJ602	GBJ603	GBJ604	GBJ605	GBJ606	GBJ607	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)								6.0	A
.375"(9.5mm) Lead Length at Tc=110°C (With heatsink)								2.8	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 3.0A D.C.								1.0	V
Maximum DC Reverse Current Ta=25°C								5.0	μA
at Rated DC Blocking Voltage Ta=100°C								500	μA
Typical Thermal Resistance Rθjc (Note 1)								3.4	°C/W
Typical Thermal Resistance RθjL (Note 2)								5.0	°C/W
Operating Temperature Range, Tj								-55 — +150	°C
Storage Temperature Range, Tstg								-55 — +150	°C

### NOTES:

1. Thermal Resistance from Junction to Case with device mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.
2. Thermal Resistance from Junction to Lead without Heatsink.

# RATING AND CHARACTERISTIC CURVES (GBJ601 THRU GBJ607)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

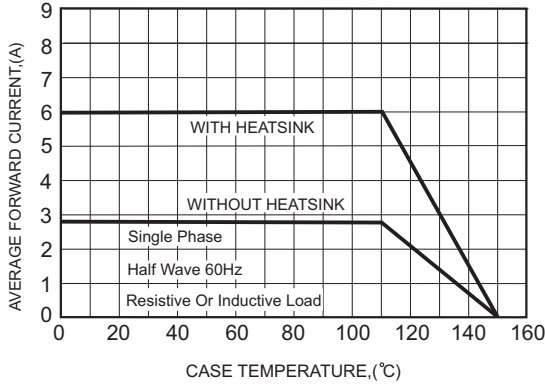


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

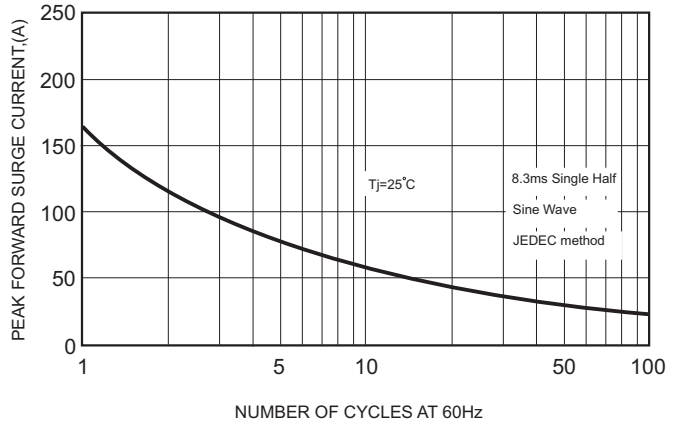


FIG.3-TYPICAL FORWARD CHARACTERISTICS

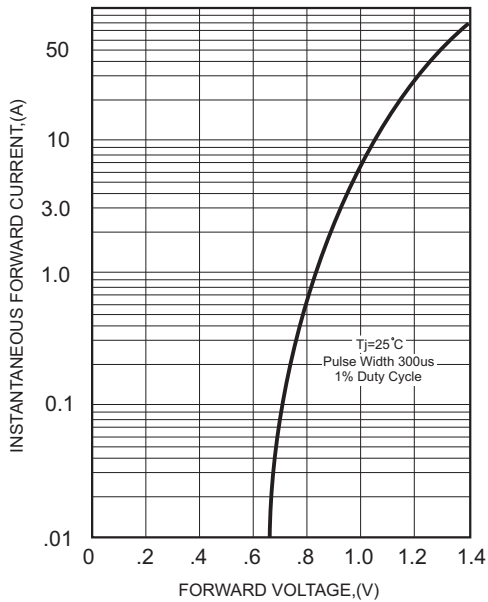


FIG.4-TYPICAL REVERSE CHARACTERISTICS

