

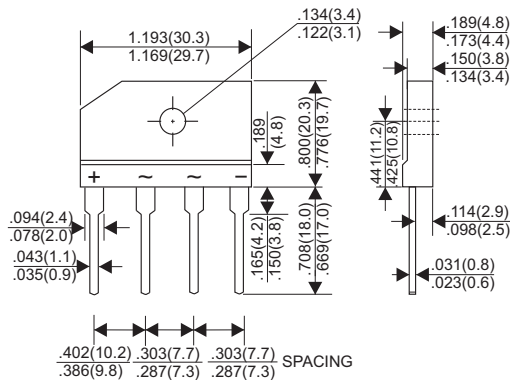


GBJ801 THRU GBJ807

SINGLE PHASE BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 8.0 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	GBJ801	GBJ802	GBJ803	GBJ804	GBJ805	GBJ806	GBJ807	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)								8.0	A
Rectified Current at T _c =110°C (Without heatsink)								2.9	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 4.0A 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 R _{θjc} (Note 1)								2.8	°C/W
Typical Thermal Resistance R _{θjL} (Note 2)								5.5	°C/W
Operating Temperature Range, T _J								-55 — +150	°C
Storage Temperature Range, T _{STG}								-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 (GBJ801 THRU GBJ807)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

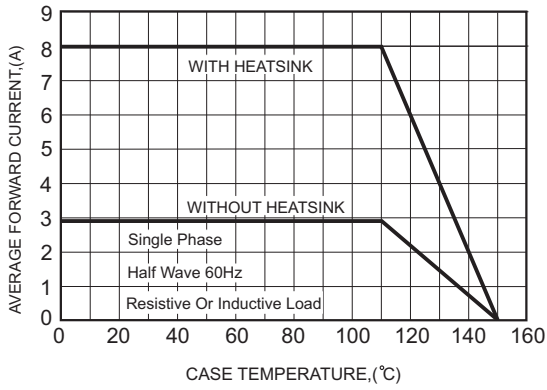


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

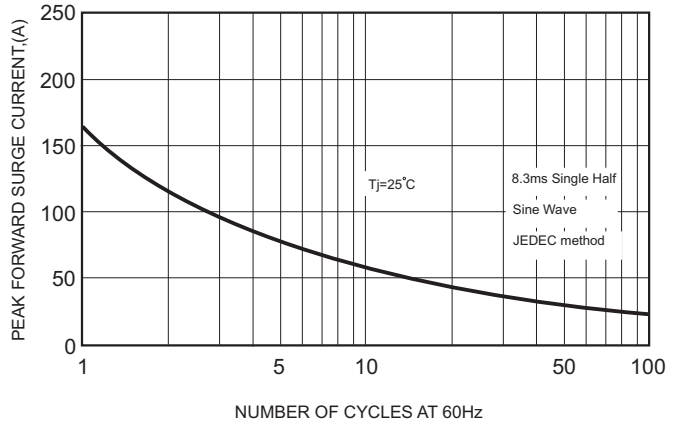


FIG.3-TYPICAL FORWARD CHARACTERISTICS

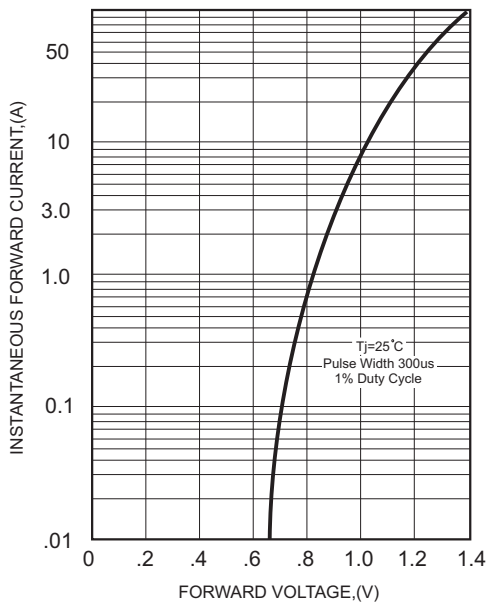


FIG.4-TYPICAL REVERSE CHARACTERISTICS

