GBJ8005 THRU GBJ810

SINGLE PHASE 8.0 AMP BRIDGE RECTIFIERS



VOLTAGE RANGE

50 to 1000 Volts

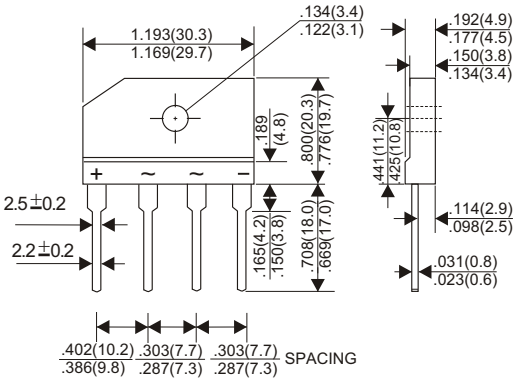
CURRENT

8.0 Amperes

FEATURES

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

GBJ



Dimensions in inches and (millimeters)

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	GBJ8005	GBJ801	GBJ802	GBJ804	GBJ806	GBJ808	GBJ810	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 Tc=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_{JC} (Note 1)	2.8							˚C/W
Typical Thermal Resistance R_{JL} (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 (GBJ8005 THRU GBJ810)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

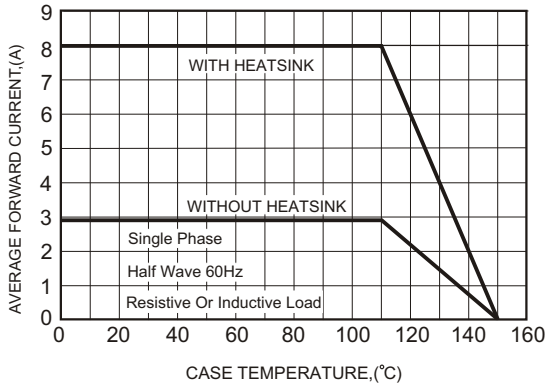


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

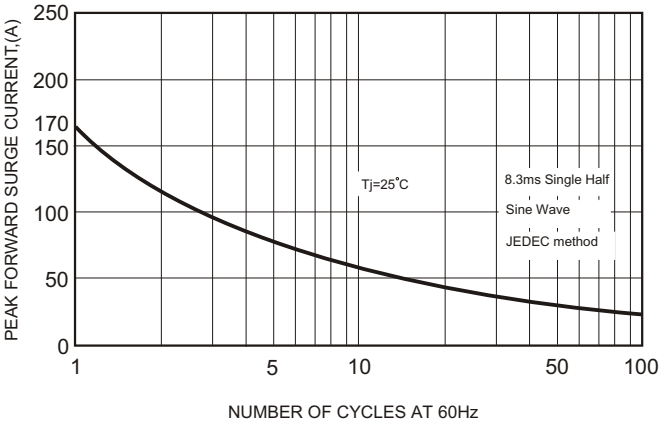


FIG.3-TYPICAL FORWARD CHARACTERISTICS

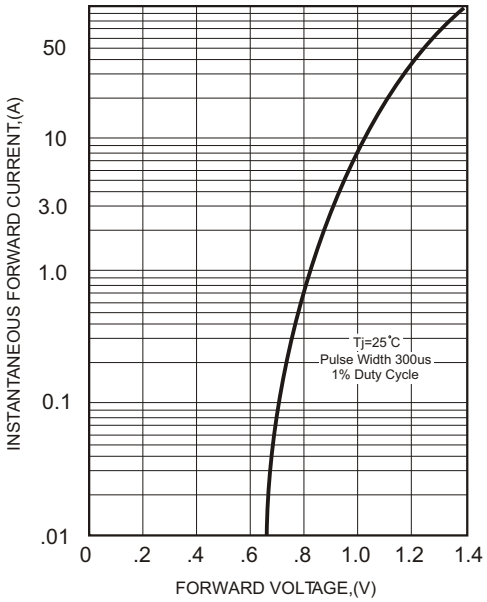


FIG.4-TYPICAL REVERSE CHARACTERISTICS

