GBJ1501 THRU GBJ1507

SINGLE PHASE 15.0 AMP BRIDGE RECTIFIERS

GW

FEATURES

* Ideal for printed circuit board
* Low forward voltage
* Low leakage current

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Lead: Plated leads solderable per MIL-STD-202, method 208 guranteed
* Mounting position: Any
* Weight: 6.8 grams

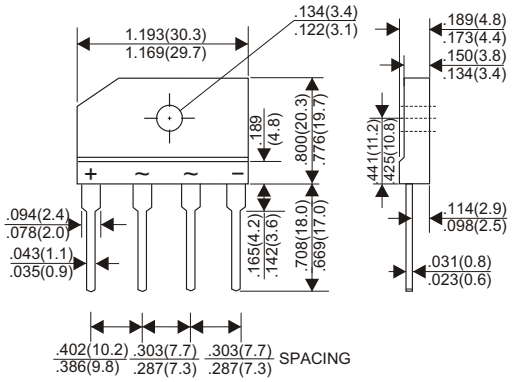
VOLTAGE RANGE

50 to 1000 Volts

CURRENT

15.0 Amperes

GBJ



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature uniess otherwies 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 Tc=100°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 Junction Capacitance (Note 1)	60							PF
Typical Thermal Resistance $R\theta_{JC}$ (Note 2)	0.8							°C/W
Operating Temperature Range, T_J	-55 — +150							°C
Storage Temperature Range, T_{STG}	-55 — +150							°C

NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal Resistance from Junction to Case with device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

RATING AND CHARACTERISTIC CURVES (GBJ1501 THRU GBJ1507)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

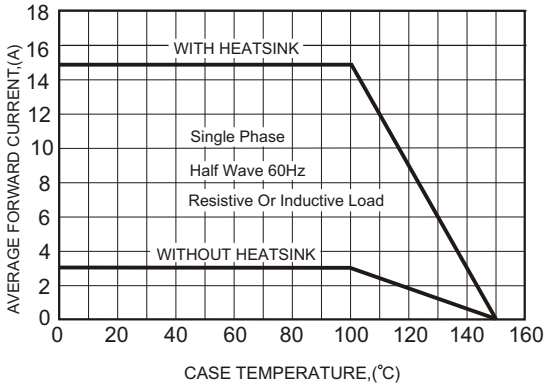


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

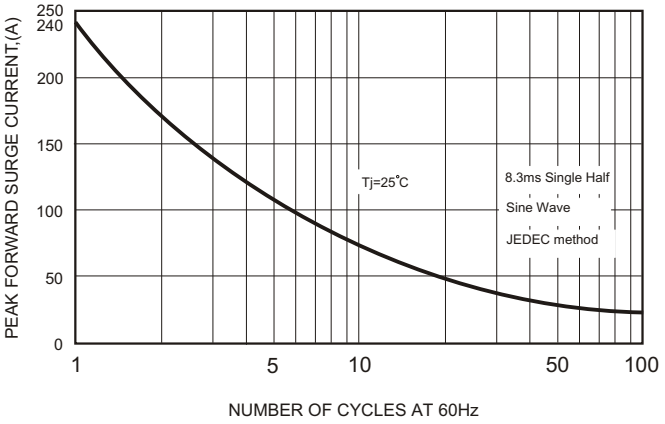


FIG.3-TYPICAL FORWARD CHARACTERISTICS

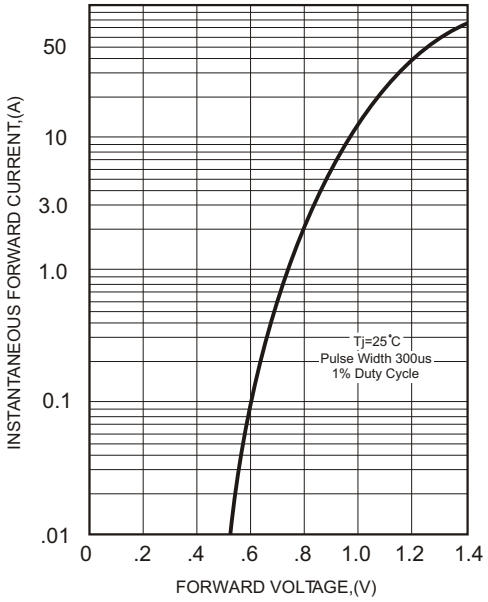


FIG.4-TYPICAL REVERSE CHARACTERISTICS