

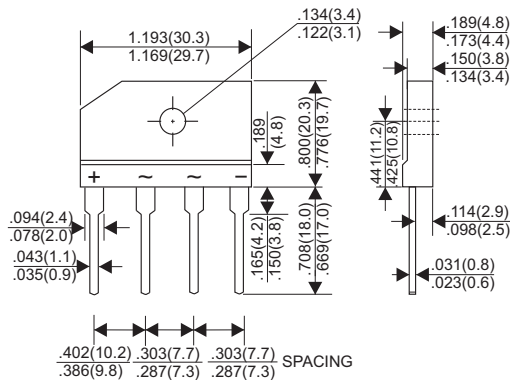


GBJ2001 THRU GBJ2007

SINGLE PHASE BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 20.0 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	GBJ2001	GBJ2002	GBJ2003	GBJ2004	GBJ2005	GBJ2006	GBJ2007	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 Current @Tc=100°C	20.0							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 10.0A D.C.	1.05							V
Maximum DC Reverse Current Ta=25°C	10							μA
at Rated DC Blocking Voltage Ta=125°C	500							μA
Typical Junction Capacitance (Note 1)	60							PF
Typical Thermal Resistance Rθjc (Note 2)	0.8							°C/W
Operating Temperature Range, Tj	-55 — +150							°C
Storage Temperature Range, Tstg	-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 (GBJ2001 THRU GBJ2007)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

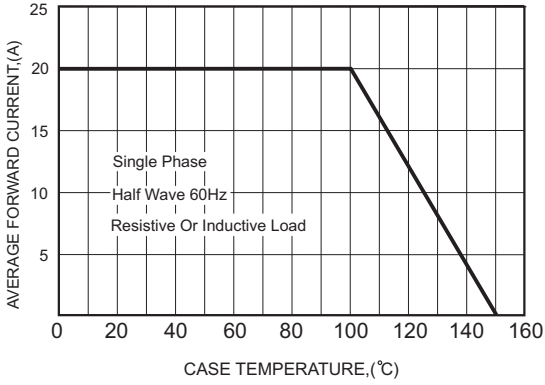


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

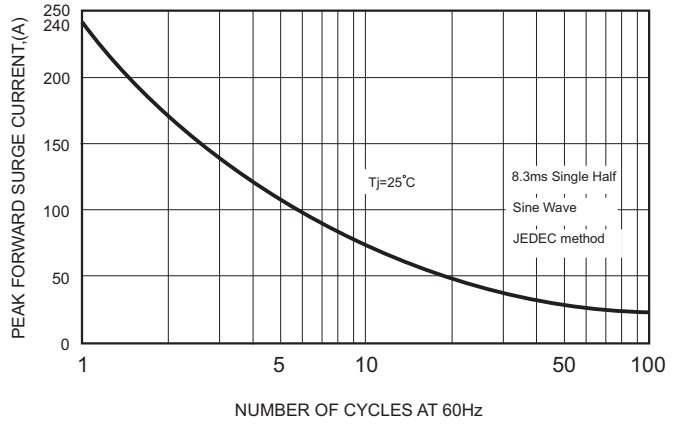


FIG.3-TYPICAL FORWARD CHARACTERISTICS

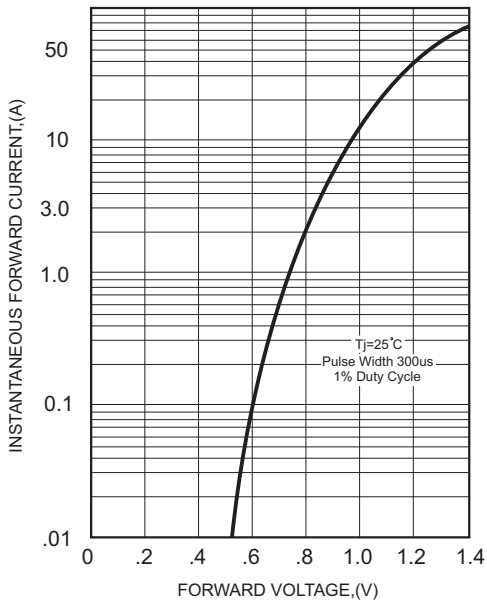


FIG.4-TYPICAL REVERSE CHARACTERISTICS

