



Pb Free Plating Product

GBJ15005 thru GBJ1510

15.0 AMPERE GLASS PASSIVATED FLAT BRIDGE RECTIFIERS

Features

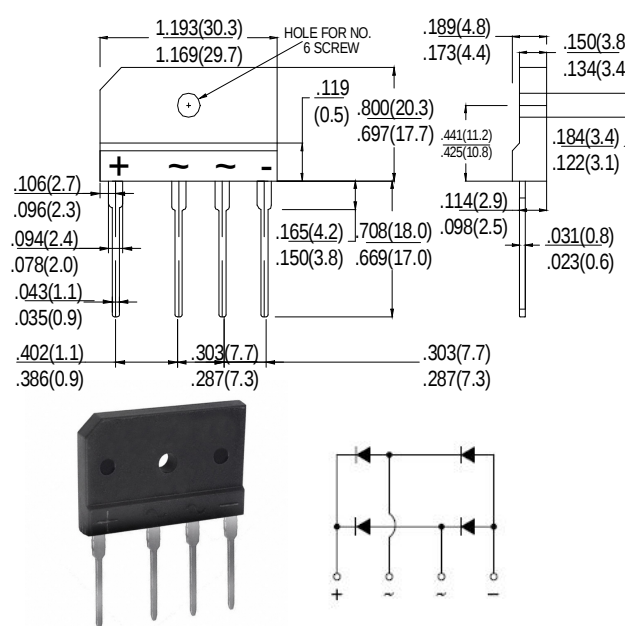
- Glass passivated chip junction
- Low forward voltage drop
- High surge overload rating of 240 A peak
- Ideal for printed circuit board

Mechanical Data

- Case: Molded plastic, GBJ(5S/6KBJ)
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Leads solderable per JESD22-B102, Meet JESD 201 class 2 whisker test
- Mounting position: Any

GBJ

Dimensions in inches and (millimeters)



Absolute Maximum Ratings and Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)									
PARAMETER	SYMBOL	GBJ15005	GBJ1501	GBJ1502	GBJ1504	GBJ1506	GBJ1508	GBJ1510	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I _{F(AV)}	15							A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	240							A
Rating for fusing (t<8.3ms)	I ² t	239							A ² s
Maximum instantaneous forward voltage (Note 1) @ 7.5 A @ 15 A	V _F	1.0 1.1							V
Maximum reverse current @ rated V _R T _J =25°C T _J =125°C	I _R	10 500							μA
Typical thermal resistance	R _{θJC}	0.8							°C/W
Operating junction temperature range	T _J	- 55 to +150							°C
Storage temperature range	T _{STG}	- 55 to +150							°C

Note 1: Pulse test with PW=300μs, 1% duty cycle

RATINGS AND CHARACTERISTICS CURVES

($T_A=25^{\circ}\text{C}$ unless otherwise noted)

FIG. 1 MAXIMUM DERATING CURVE FOR OUTPUT CURRENT

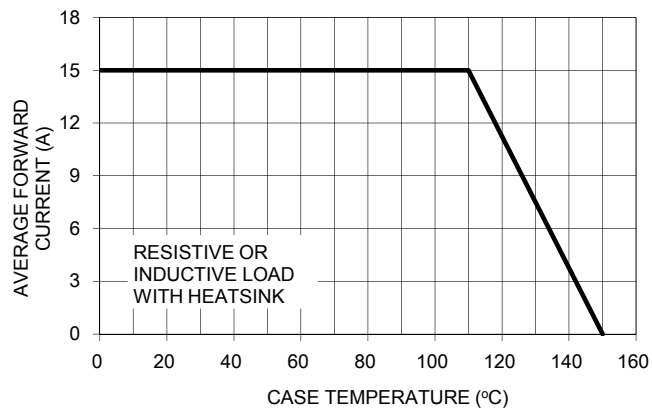


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

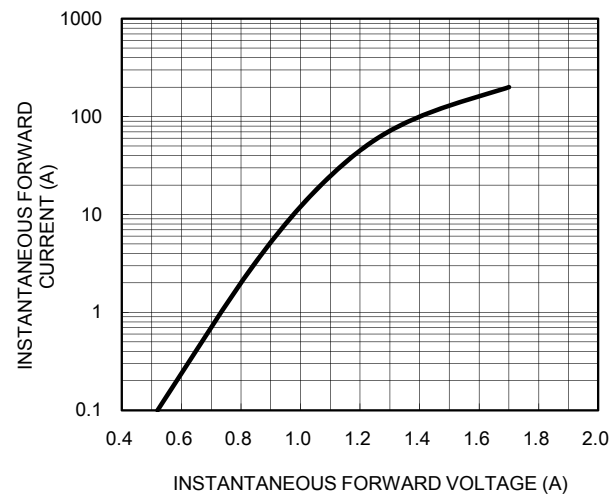


FIG. 3 MAXIMUM SURGE CURRENT

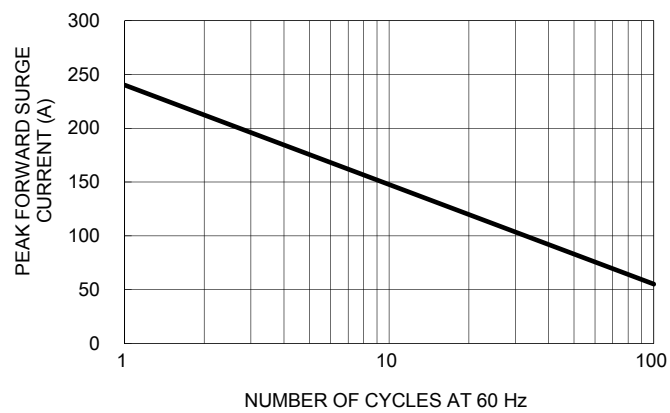


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

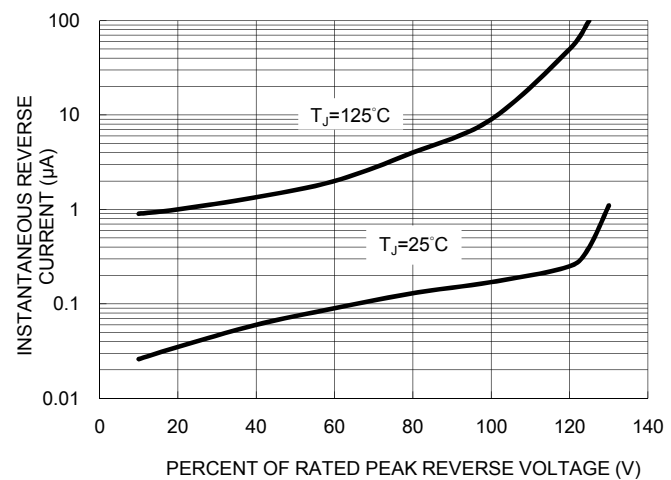


FIG. 5 TYPICAL JUNCTION CAPACITANCE

