Pb Free Plating Product

GBJ3506 thru GBJ3510

35.0 AMPERE GLASS PASSIVATED FLAT BRIDGE RECTIFIERS

Features

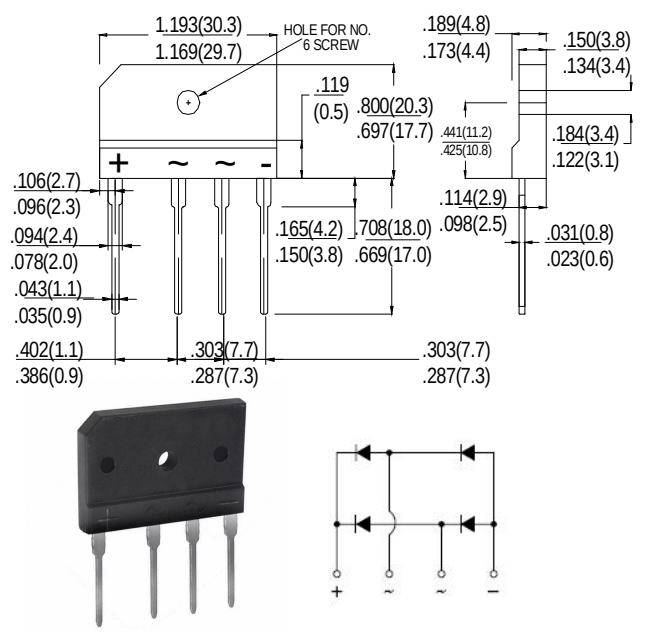
- Glass passivated chip junction
- Low forward voltage drop
- High surge overload rating of 350 A peak
- Ideal for printed circuit board

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	GBJ3506	GBJ3508	GBJ3510	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	600	800	1000	V
Maximum RMS voltage	V_{RMS}	420	560	700	V
Maximum DC blocking voltage	V_{DC}	600	800	1000	V
Maximum average forward rectified current	$I_{F(AV)}$	35			A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	350			A
Rating for fusing (t<8.3ms)	I^2t	508			A^2s
Maximum instantaneous forward voltage (Note 1) @ 17.5 A	V_F	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 (Note 2)	$R_{\theta JC}$	0.6			°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

Note 2: With idea heatsink

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RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

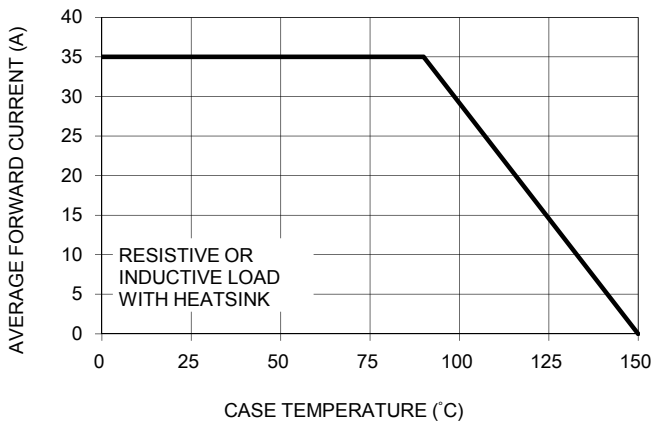


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

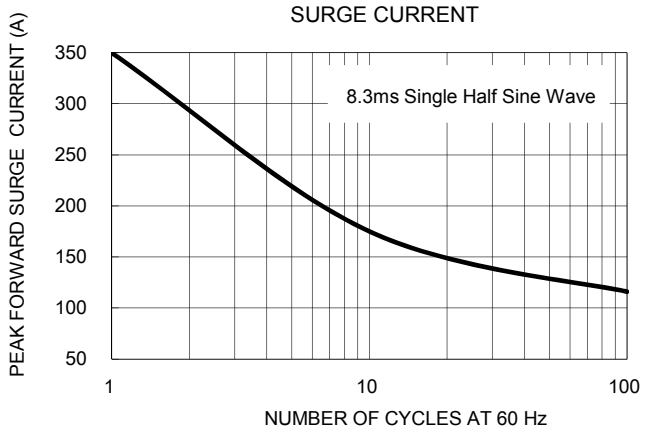


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

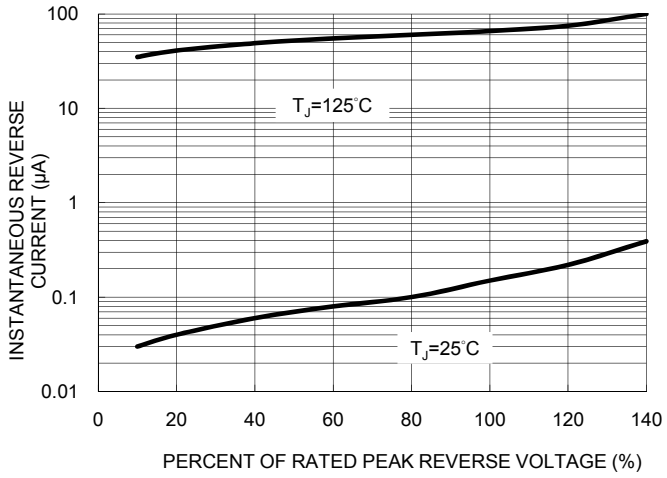


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

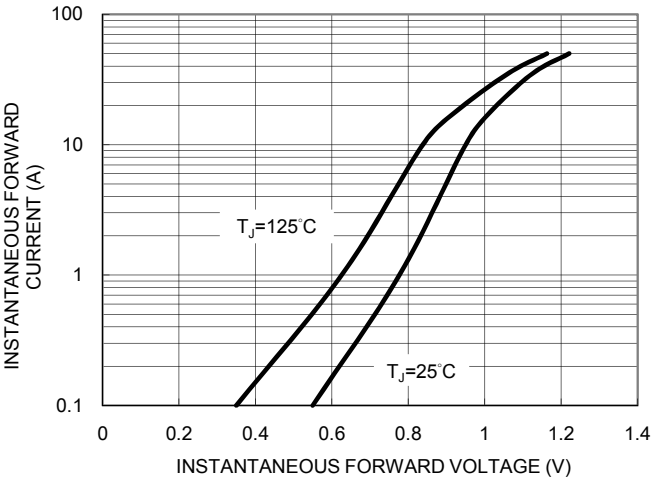
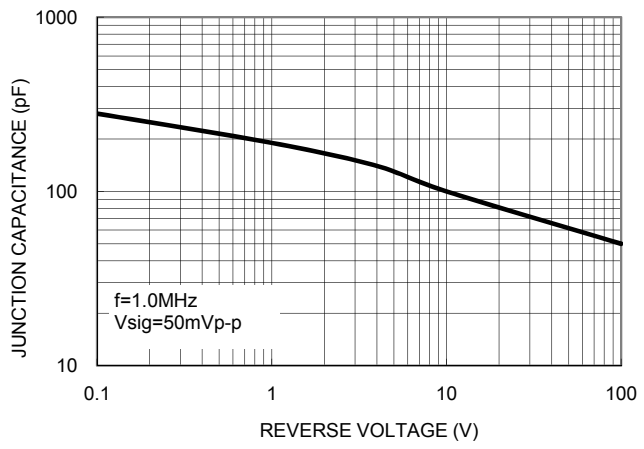


FIG. 5 TYPICAL JUNCTION CAPACITANCE



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