



GBJ25005 THRU GBJ2510

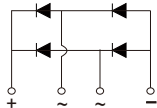
Glass Passivated Bridge Rectifier

Features

- ★ Ideal for printed circuit boards
- ★ High surge current capability
- ★ Low forward voltage drop
- ★ Glass passivated chip

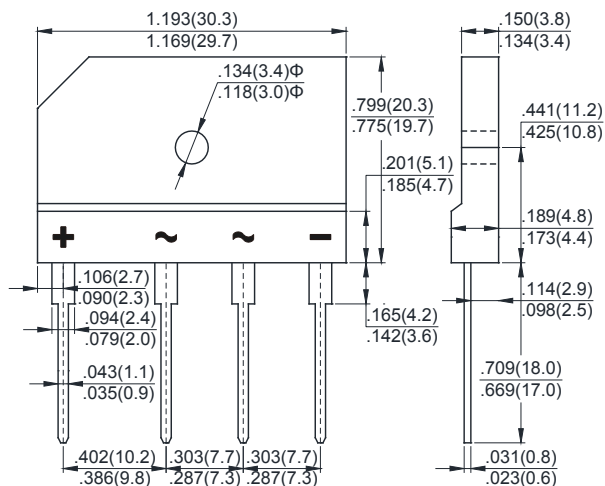
Mechanical Data

- ★ Case: Molded plastic, GBJ
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-202, method 208
- ★ Polarity: As marked on body



Voltage Range 50 to 1000 V
Current 25 Ampere

GBJ



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	GBJ 25005	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	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 @ $T_C=100^\circ\text{C}$ (with heatsink Note1)	$I_{F(AV)}$	25							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	350							A
Maximum instantaneous forward drop per diode @ $I_F=12.5\text{A}$	V_F	1.0							V
Maximum DC reverse current at rated DC blocking voltage @ $T_J=25^\circ\text{C}$ @ $T_J=125^\circ\text{C}$	I_R	10 500							μA
Typical junction capacitance per diode (Note2)	C_J	85							pF
Typical thermal resistance from junction to ambient (Note 1)	$R_{\theta JA}$	4.5							$^\circ\text{C/W}$
Typical thermal resistance from junction to lead (Note 1)	$R_{\theta JL}$	1.5							$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-50 to +150							$^\circ\text{C}$

NOTES : (1) Device mounted on 300mm×300mm×1.6mm Cu plate heatsink.
(2) Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

RATINGS AND CHARACTERISTICS CURVES GBJ25005 THRU GBJ2510

Fig.1 - Forward Current Derating Curve

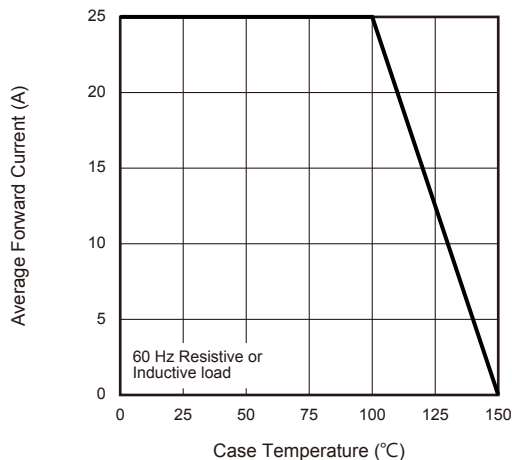


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

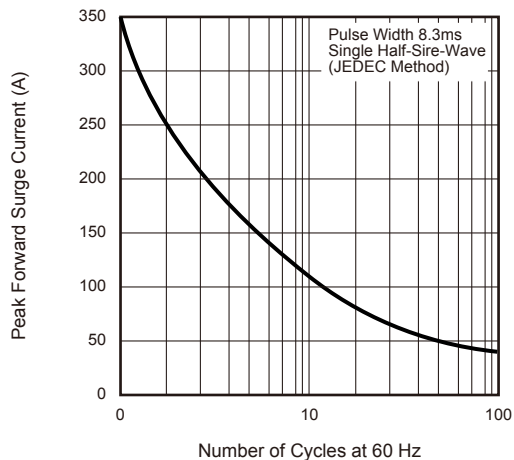


Fig.3 - Typical Instantaneous Forward Characteristics

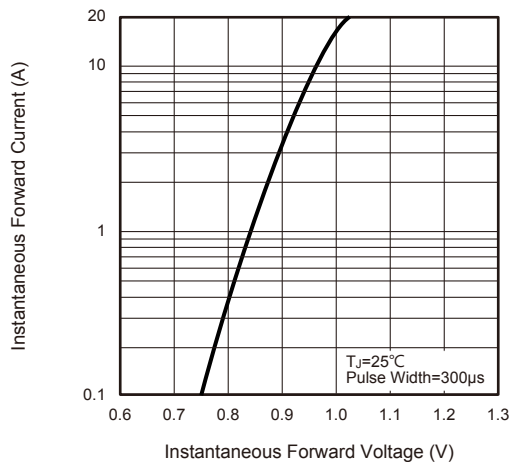


Fig.4 - Typical Reverse Leakage Characteristics

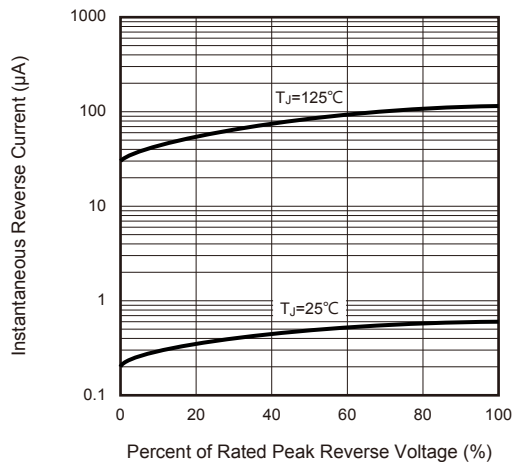


Fig.5 - Typical Junction Capacitance

