



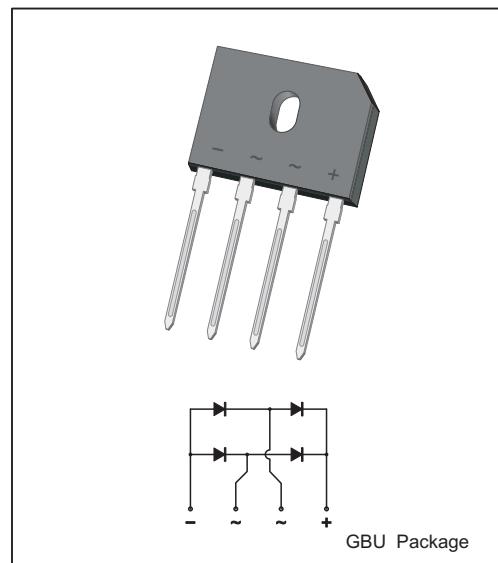
10A Plug-in GLASS PASSIVATED BRIDGE RECTIFIER

FEATURES:

- Glass Passivated Chip
- Reverse Voltage - 400 to 600 V
- Forward Current - 10 A
- High Surge Forward Current Capability
- Component in accordance to ROHS 2002/95/EC

MECHANICAL DATA

- Package: GBU
- Epoxy meets UL 94V-0 flammability rating
- Terminals: Pure tin plated leads, solderable per J-STD-002 and JESD22-B102, E3 suffix for consumer grade, meet JESD201 class 1A whisker test.
- Polarity: As marked on body
- Approx Weight: 3.8g (0.134oz)



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	EGBU1004G	EGBU1006G	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	400	600	V
Maximum RMS voltage	V_{RMS}	280	420	V
Maximum DC Blocking Voltage	V_{DC}	400	600	V
Average Rectified Output Current With heat sink $T_c=100^\circ\text{C}$	I_o	10		A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	200		A
Maximum Forward Voltage at 5.0 A	V_F	1.3	1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a=25^\circ\text{C}$ $T_a=125^\circ\text{C}$	I_R	10 500		μA
Typical Junction Capacitance ($f=1\text{MHz}, V_R=4\text{V}$)	C_j	80		pF
Typical Thermal Resistance (Note1)	$R_{\theta JA}$ $R_{\theta JC}$	20 4.8		°C/W
Maximum Reverse Recovery Time (Note2)	trr	35		ns
Operating and Storage Temperature Range	T_j, T_{stg}	-40 ~ +150		°C

Note: 1. Mounted on glass epoxy PC board with $4 \times 2.54 \times 50.8\text{mm}$ copper pad and With heat sink.

Note: 2. Measured with $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I_{rr} = 0.25\text{ A}$.



Typical characteristic curve

Fig.1 Average Rectified Output Current Derating Curve

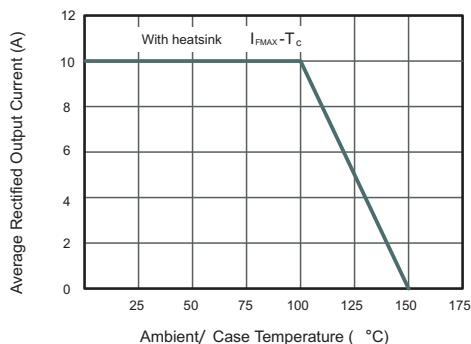


Fig.2 Typical Reverse Characteristics

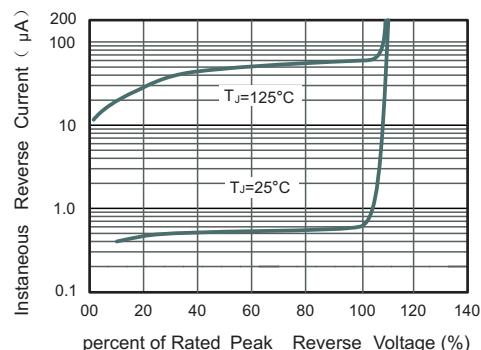


Fig.3 Typical Instantaneous Forward Characteristics

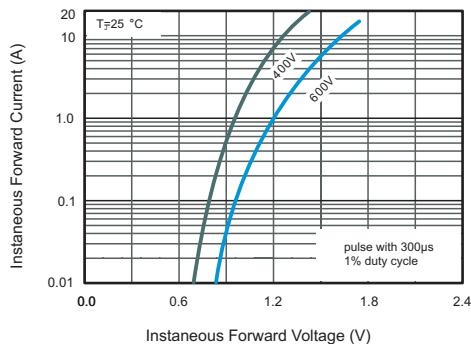
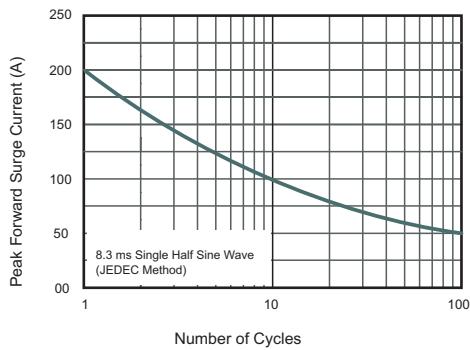


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

GBU Package

