



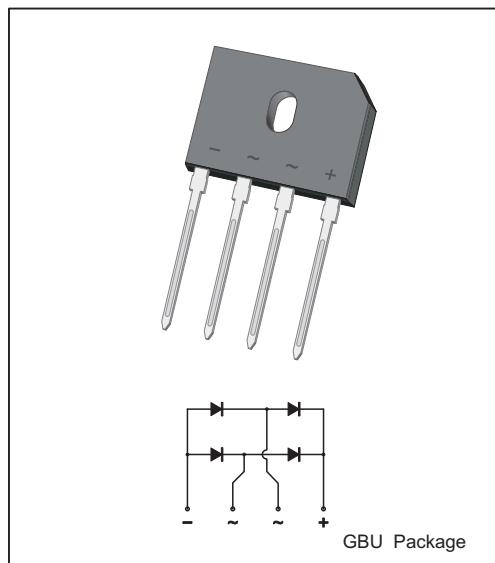
6.0A Fast Recovery Bridge Rectifier

FEATURES:

- Fast recovery
- Reverse Voltage - 1000 V
- Forward Current - 6.0 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	GBUR610G	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Maximum Average Forward	I_{AV}	6.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	120	A
I^2t Rating for Fusing($T < 8.3\text{ms}$)	I^2t	60	A^2s
Maximum Forward Voltage at 3.0 A	V_F	1.3	V
Maximum DC Reverse Current $T_J=25\text{ }^\circ\text{C}$ $T_J=125\text{ }^\circ\text{C}$	I_R	5 100	μA
Typical Junction Capacitance (Note1)	C_j	50	pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$ $R_{\theta JC}$	22 5	$^\circ\text{C/W}$
Reverse Recovery Time (Note3)	trr	500	nS
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

Note:

1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Products installed on the PCB, with heat sink

3. $I_F=0.5\text{A}, I_R=1\text{A}, I_{RR}=0.25\text{A}$



Typical characteristic curve

Fig.1 Average Rectified Output Current Derating Curve

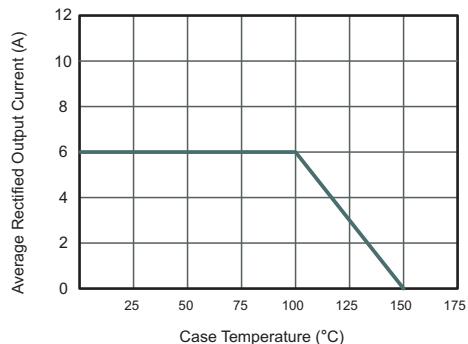


Fig.2 Typical Reverse Characteristics

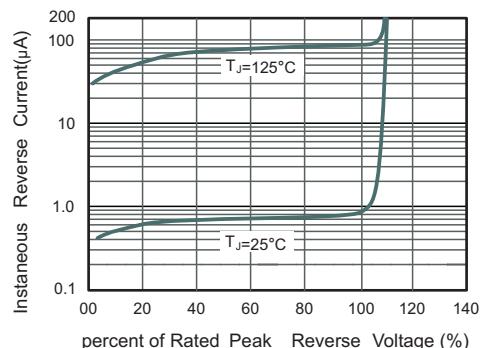


Fig.3 Typical Instantaneous Forward Characteristics

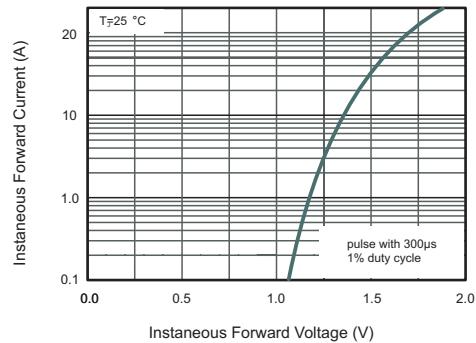
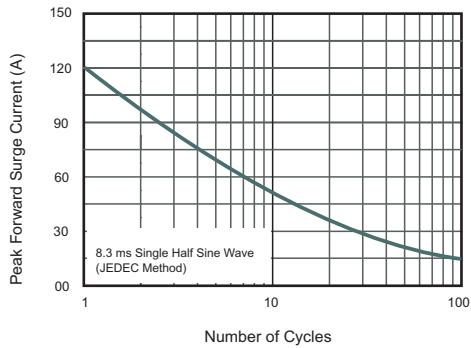


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

GBU Package

