



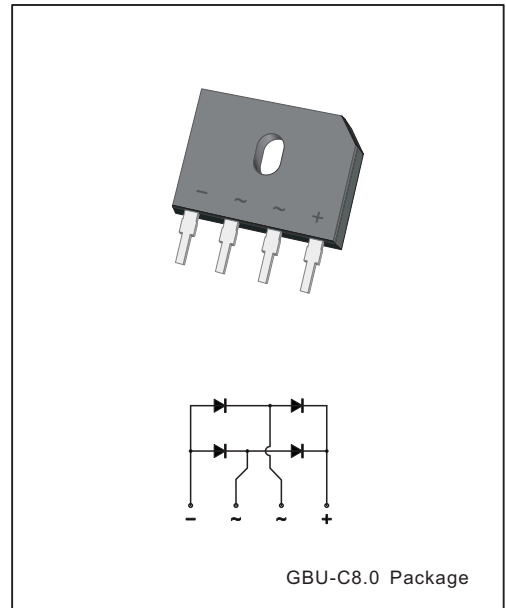
6A Plug-in GLASS PASSIVATED BRIDGE RECTIFIER

FEATURES:

- Glass Passivated Chip
- Reverse Voltage - 400 to 1000 V
- Forward Current - 6.0 A
- Small size, simple installation
- 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	GBU604	GBU606	GBU608	GBU610	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	400	600	800	1000	V
Average Rectified Output Current With heatsink $T_c=100^{\circ}C$ Without heatsink $T_a=25^{\circ}C$	I_O	6.0 3.0				A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	175				A
Maximum Forward Voltage at 3.0 A (Note1)	V_F	1.0				V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a=25^{\circ}C$ $T_a=125^{\circ}C$	I_R	5 500				μA
Typical Junction Capacitance (Note2)	C_j	50				pF
Typical Thermal Resistance (Note3)	$R_{\theta JA}$ $R_{\theta JC}$	22 5				$^{\circ}C/W$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150				$^{\circ}C$

Note: 1. Pulse test with $PW=300\mu s$, 1% duty cycle.

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

3. Mounted on glass epoxy PC board with $4 \times 2.54 \times 50.8$ mm copper pad and With heatsink.

Typical characteristic curve

Fig.1 Average Rectified Output Current Derating Curve

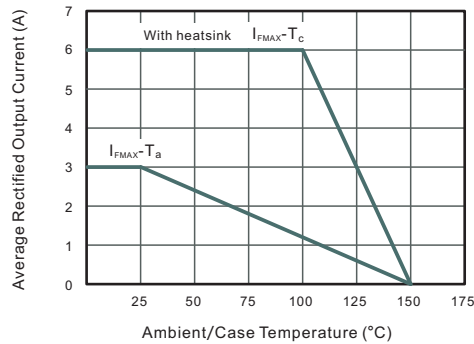


Fig.2 Typical Reverse Characteristics

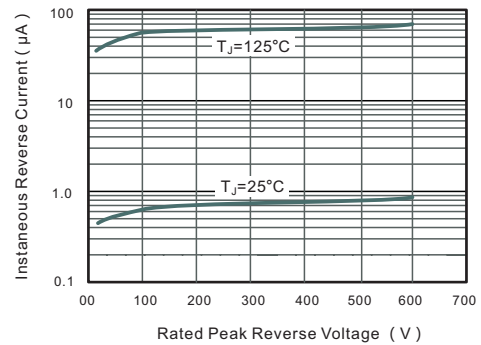


Fig.3 Typical Instantaneous Forward Characteristics

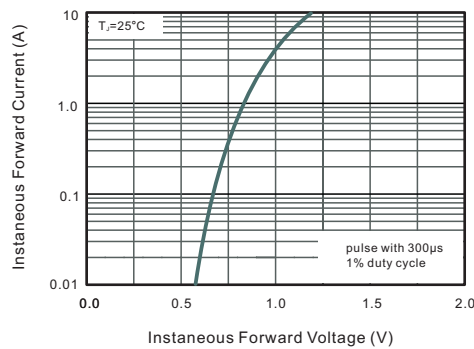
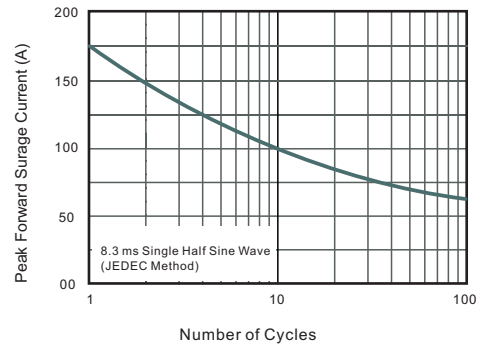


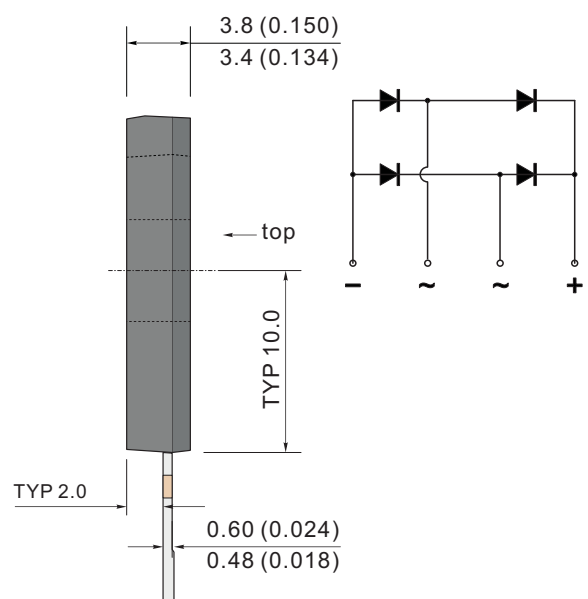
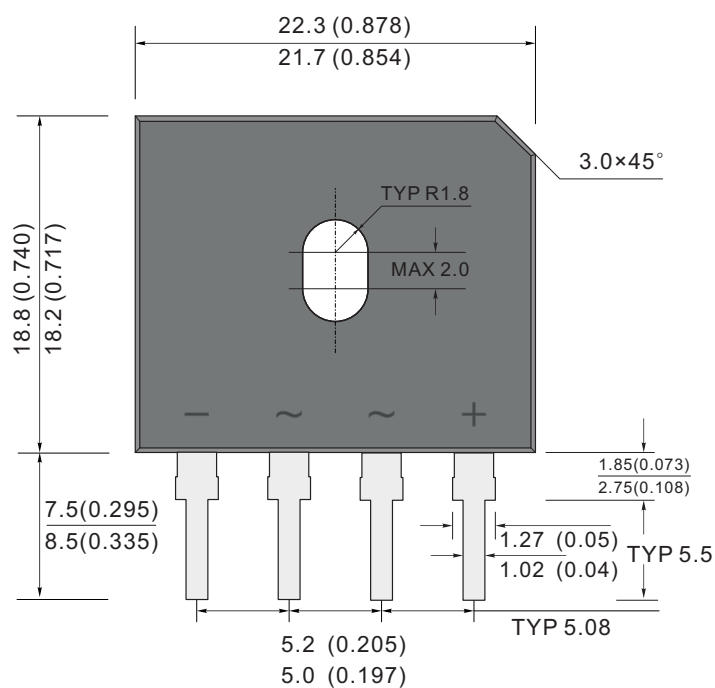
Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

GBU-C8.0 Package



Unit : mm (inches)