

## FEATURES

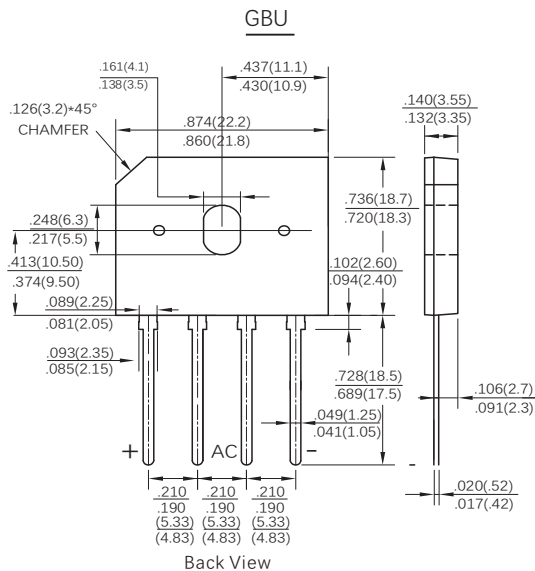
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- High current capability,Low forward voltage drop
- Soft recovery improves EMC performance
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU

## MECHANICAL DATA

- Case: GBU molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750,method 2026
- Mounting Position: Any

## TYPICAL APPLICATIONS

Used in AC/DC bridge full wave rectification for SMPS, lighting ballaster, adapter, charger, home appliances, office equipment, and telecommunication applications.



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified. Single phase ,half wave , resistive or inductive load. For capacitive load,derate current by 20%.)

| Parameters  | Symbol             | EGBU1006        | Units            |
|---|--------------------|-----------------|------------------|
| Maximum Reverse Peak Reverse Voltage  | $V_{RRM}$          | 600             | Volts            |
| Maximum RMS Voltage   | $V_{RMS}$          | 420             | Volts            |
| Maximum DC Blocking Voltage   | $V_{DC}$           | 600             | Volts            |
| Maximum Average Forward Rectified Current, (See Fig 2)                            | $I_{FAV}$          | 10.0            | Amps             |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | $I_{FSM}$          | 175             | Amps             |
| Rating for Fusing (t =8.3ms)  | $I^2t$             | 127             | A <sup>2</sup> S |
| Maximum Instantaneous Forward Voltage at 5.0A DC                                  | $V_F$              | 1.70            | Volts            |
| Maximum DC Reverse Current at rated DC blocking voltage                           | $T_A=25^{\circ}C$  | 5               | $\mu A$          |
|   | $T_A=125^{\circ}C$ | 100             | $\mu A$          |
| Typical Junction Capacitance (Note 1)   | $C_j$              | 55              | pF               |
| Typical thermal resistance (Note 2)   | Junction-Ambient   | $R_{\theta JA}$ | 25               |
|   | Junction-Case      | $R_{\theta JC}$ | 2.0              |
| Maximum reverse recovery time(Note3)  | $t_{rr}$           | 35              | ns               |
| Operating junction and storage temperature range                                  | $T_j$ / $T_{STG}$  | -55 to +150     | $^{\circ}C$      |

NOTE: 1.Measured at 1MHz and applied reverse voltage of 4.0 Volts.  
2 Unit mounted on 50mm x 50mm x 1.6mm copper plate heatsink  
3. Test conditions:  $I_s=0.5A, I_R=1.0A, I_{RM}=0.25A$ .

FIG.1-MAXIMUM FORWARD SURGE CURRENT

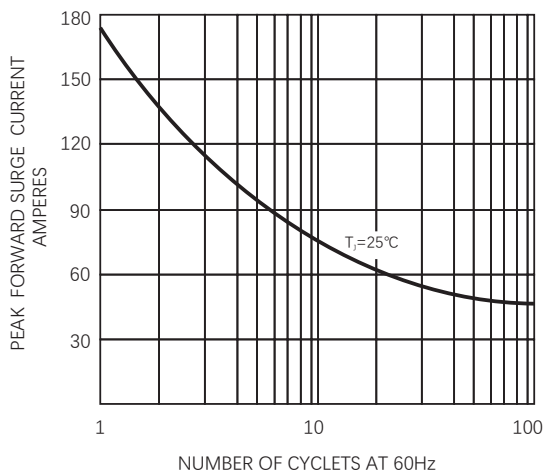


FIG.2 FORWARD CURRENT DERATING CURVE

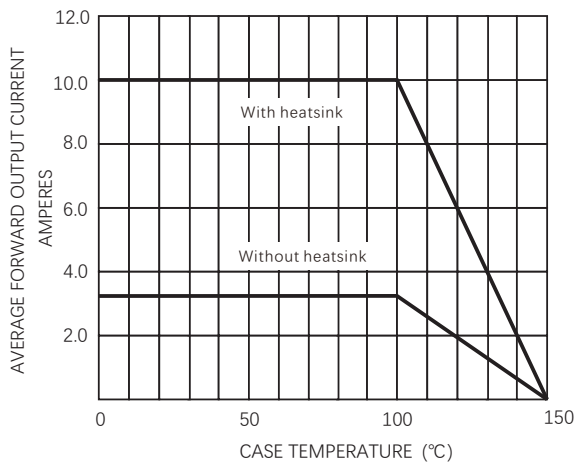


FIG. 3-TYPICAL FORWARD CHARACTERISTICS

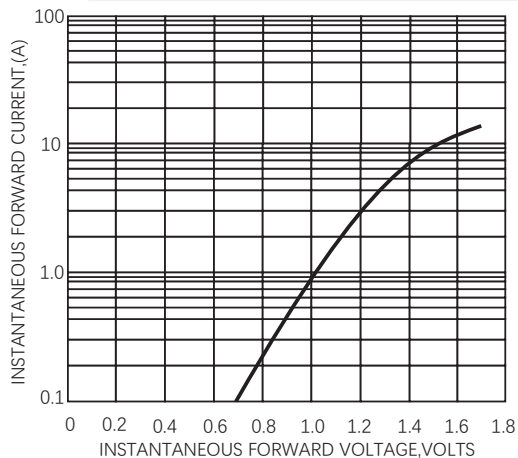
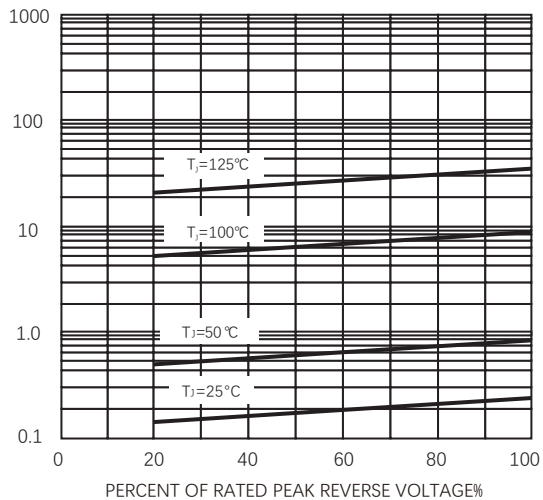


FIG.4 -TYPICAL REVERSE CHARACTERISTICS



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