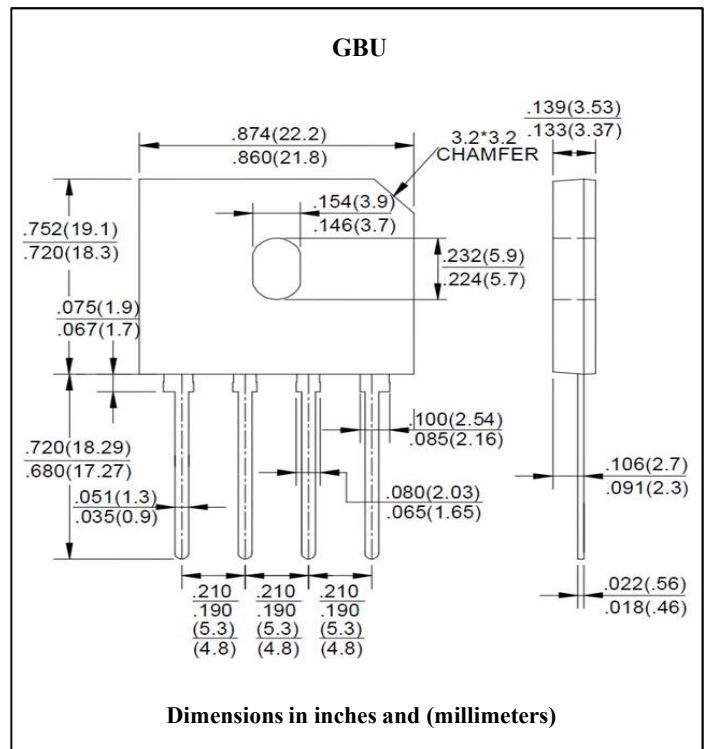


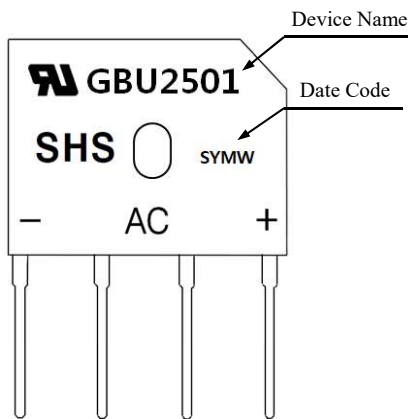
Glass Passivated Bridge Rectifiers
Reverse Voltage 50 to 1000 Volts Forward Current 25 Amperes

Features

- Surge overload rating -350 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material used carries underwriters laboratory classification 94V-0
- Mounting Position: Any



Marking



Maximum Ratings & Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified
Single phase half wave 60 Hz, resistive or inductive load
For capacitive load, derate current by 20%

| Parameter | Symbol | GBU 2501 | GBU 2502 | GBU 2503 | GBU 2504 | GBU 2505 | GBU 2506 | GBU 2507 | Unit | Remark |
|---|---------------|--|----------|----------|----------|----------|----------|----------|---------------|-------------------|
| 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 | $I_F(AV)$ | 25 (With heatsink) | | | | | | | A | Note 1 |
| | | 4.2 (@ $T_c=100^\circ C$, Without heatsink) | | | | | | | | |
| Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method) | I_{FSM} | 350 | | | | | | | A | |
| Maximum Instantaneous Forward Voltage @12.5A | V_F | 1.0 | | | | | | | V | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I_R | 10.0 | | | | | | | uA | $T_a=25^\circ C$ |
| | | 500 | | | | | | | uA | $T_a=125^\circ C$ |
| $I^2 t$ Rating for fusing ($t<8.3ms$) | $I^2 t$ | 508 | | | | | | | pF | |
| Typical Junction Capacitance | C_J | 70 | | | | | | | pF | Note 2 |
| Typical Thermal Resistance | $R_{th(j-c)}$ | 2.2 | | | | | | | $^\circ C /W$ | Note 1 |
| Operating Temperature Range | T_J | -55 to +150 | | | | | | | $^\circ C$ | |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | $^\circ C$ | |

Note 1. Device mounted on 100mm×100mm ×1.6mm Cu Plate Heatsink

Note 2. Measured at 1MHz and Applied Reverse Voltage of 4.0Volts D.C

Ratings and Characteristics Curves (Ta=25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

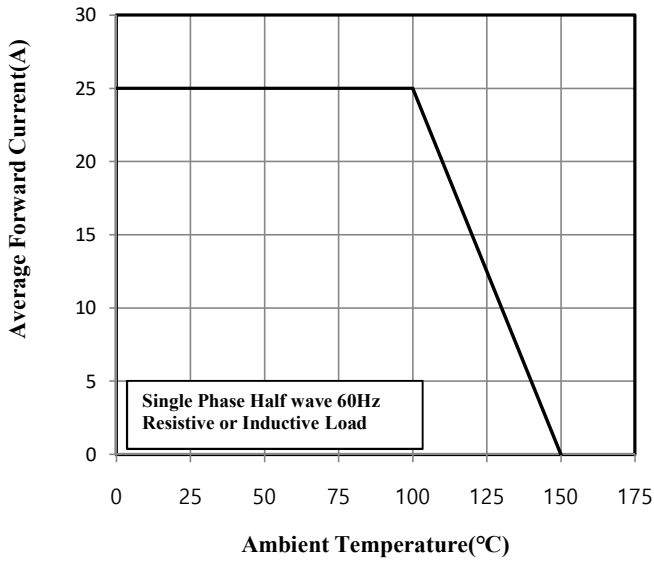


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

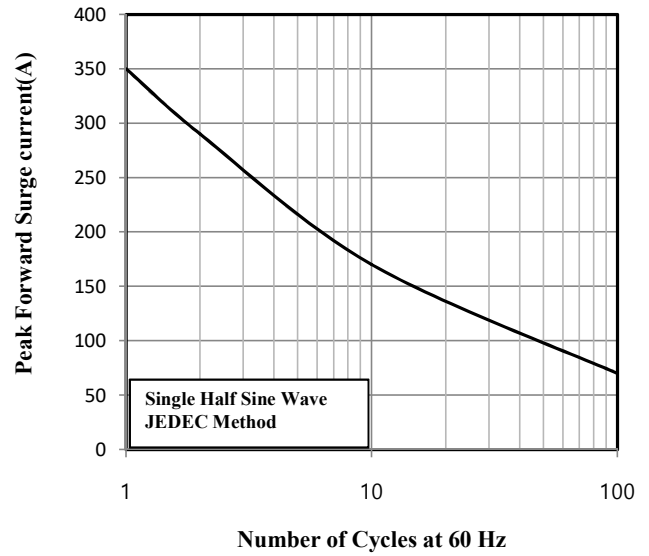


Fig.3 Typical Instantaneous Forward Characteristics

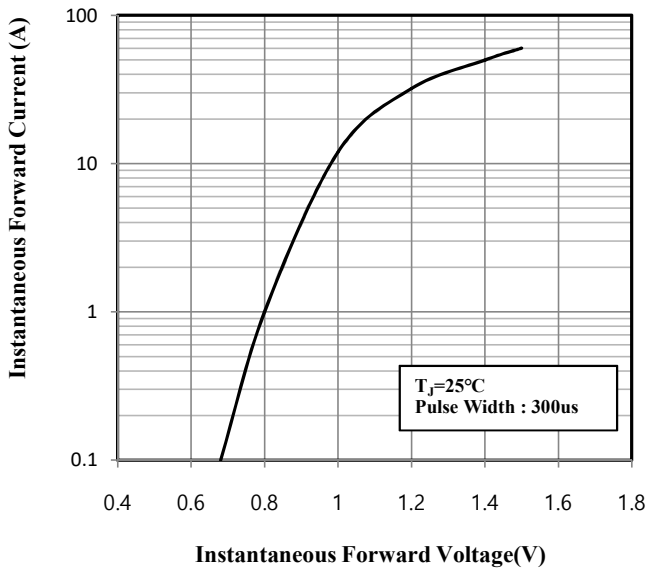


Fig.4 Typical Reverse Characteristics

