

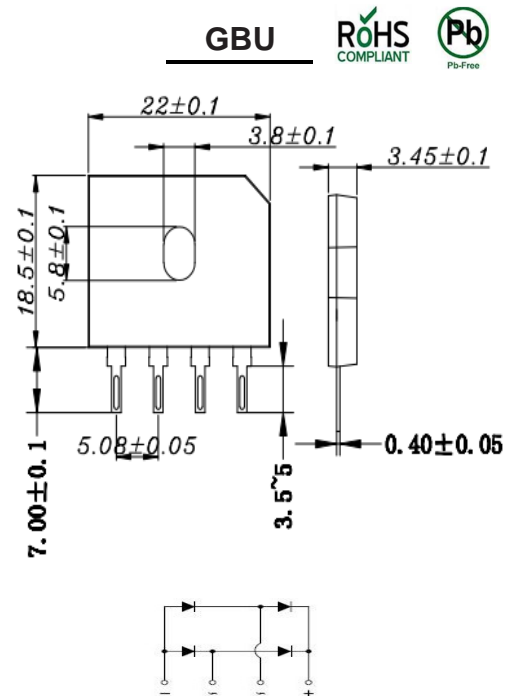


Features

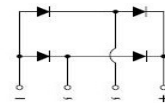
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- Glass passivated Junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250°C/10 seconds at terminals

Mechanical Data

- Case :** Molded plastic body
- Terminals :** Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity :** Polarity symbol marking on body
- Mounting Position :** Any



Dimensions in inches and (millimeters)



Maximum Ratings And Electrical Characteristics

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

| Parameter | SYMBOLS | GBU 6005G | GBU 601G | GBU 602G | GBU 604G | GBU 606G | GBU 608G | GBU 610G | UNITS |
|--|----------------|-------------|----------|----------|----------|----------|----------|----------|------------------|
| 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 with heatsink | $I_{(AV)}$ | 6.0 | | | | | | | A |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | I_{FSM} | 175.0 | | | | | | | A |
| Rating for fusing ($t=8.3ms, T_A=25^\circ C$) | I_t^2 | 93.4 | | | | | | | A ² s |
| Maximum instantaneous forward voltage at 6.0A | V_F | 1.10 | | | | | | | V |
| Maximum DC reverse current $T_A = 25^\circ C$ at rated DC blocking voltage $T_A = 125^\circ C$ | I_R | 5.0 500 | | | | | | | μA |
| Typical junction capacitance (Note 1) | C_J | 42.0 | | | | | | | pF |
| Typical thermal resistance | R_{qJA} | 55.0 | | | | | | | °C/W |
| Operating junction and storage temperature range | T_J, T_{STG} | -55 to +150 | | | | | | | °C |

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.



Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

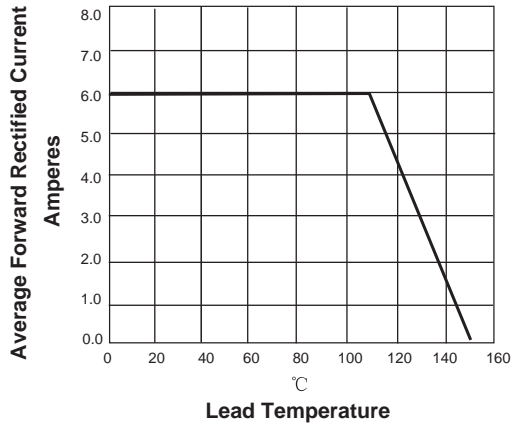


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

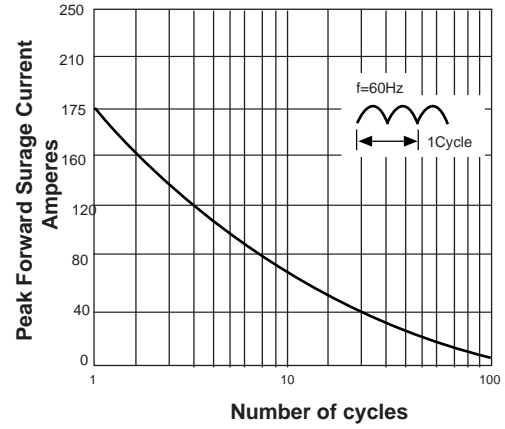


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

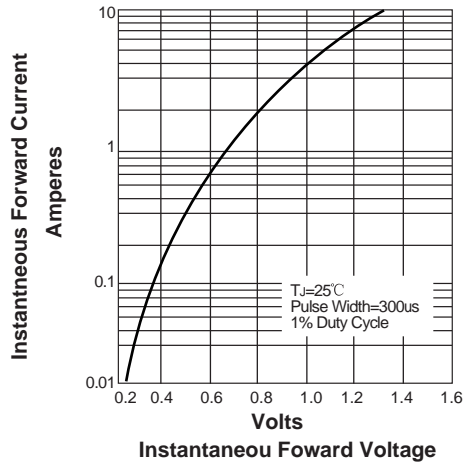


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

