

# GBU25005~GBU2510

Single Phase 25.0Amp Glass passivated Bridge Rectifiers

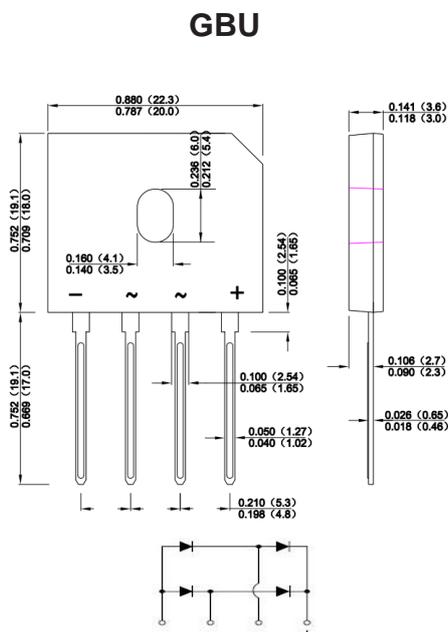


## Features

- 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
- 260°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 25005	GBU 2501	GBU 2502	GBU 2504	GBU 2506	GBU 2508	GBU 2510	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	$I_{(AV)}$	25.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	280.0							A
Rating for fusing (t=8.3ms, $T_a=25^\circ\text{C}$ )	$I_t^2$	253							$A^2s$
Maximum instantaneous forward voltage at 12.5A	$V_F$	1.10							V
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	$I_R$	2.0 200							$\mu\text{A}$
Typical junction capacitance (Note 1)	$C_J$	54.0							pF
Typical thermal resistance	$R_{qJA}$	25.0							$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150							$^\circ\text{C}$

**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

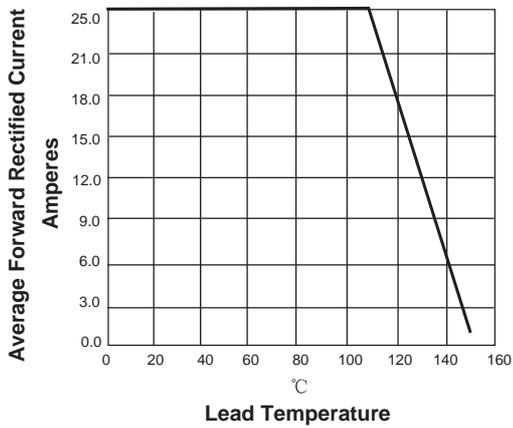


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

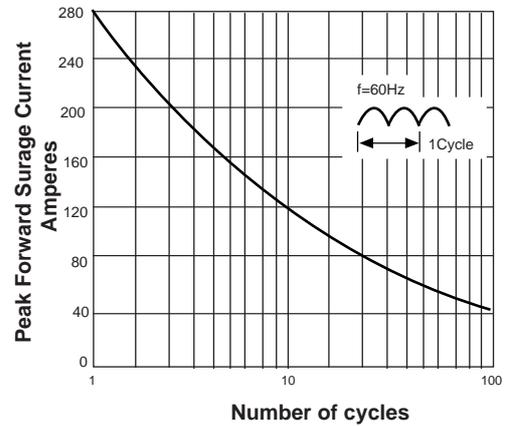


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

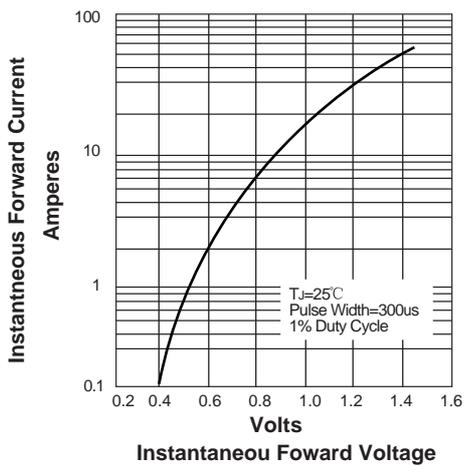


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

