

## GBU6005~GBU610

### Single Phase 6.0Amp 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  
250°C/10 seconds at terminals

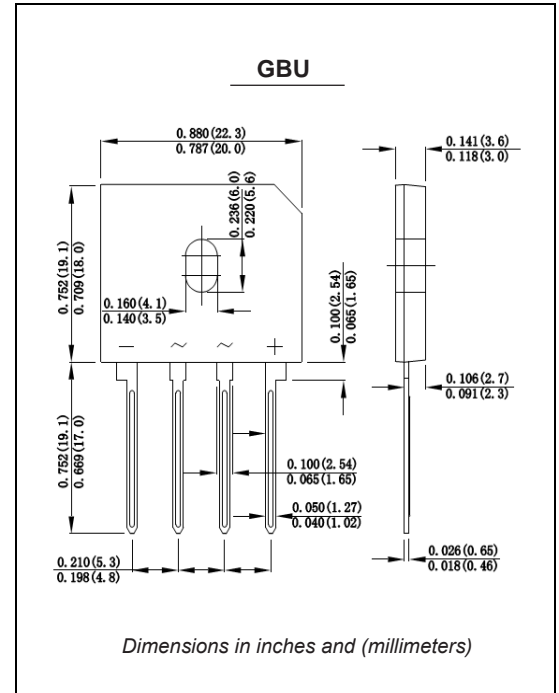
#### Mechanical Data

**Case:** Molded plastic body

**Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity:** Polarity symbol marking on body

**Mounting Position:** Any



### 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%.

	SYMBOLS	GBU 6005	GBU 601	GBU 602	GBU 604	GBU 606	GBU 608	GBU 610	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at $T_L=50^\circ\text{C}$	$I_{(AV)}$	6.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150							Amps
Maximum instantaneous forward voltage at 3.0A	$V_F$	1.1							Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	$I_R$	5.0 500							$\mu\text{A}$
Typical junction capacitance (Note 1)	$C_J$	25.0							pF
Typical thermal resistance (Note 2)	$R_{qJA}$	16							$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-50 to +150							$^\circ\text{C}$

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
2. Mounted on PCB with 12\*12mm copper pad

# Ratings And Characteristic Curves

## GBU6005 THRU GBU610

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

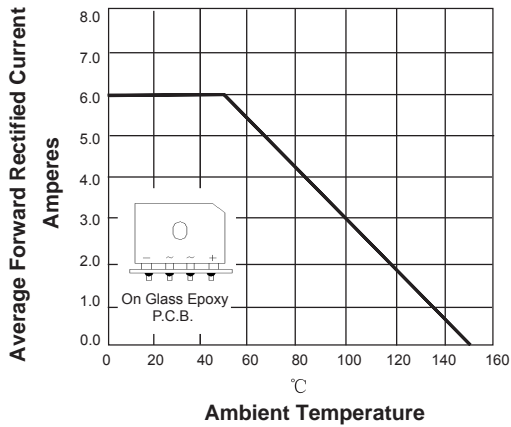


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

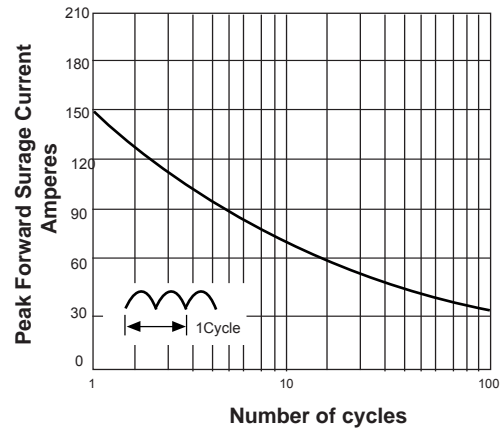


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

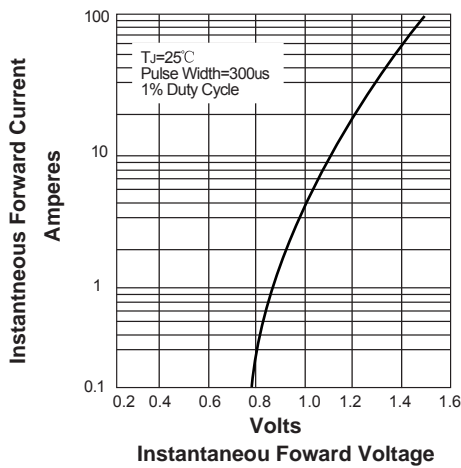


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

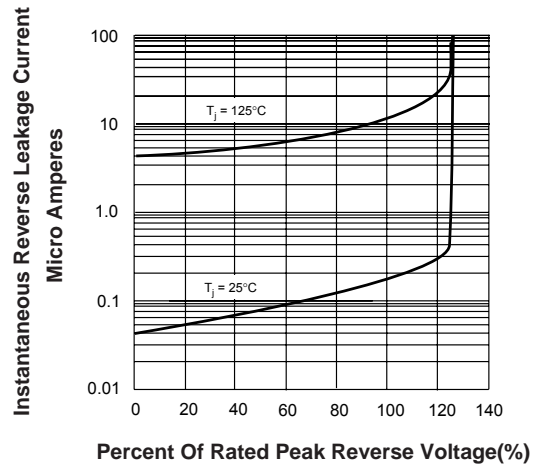


FIG. 5-TYPICAL JUNCTION CAPACITANCE

