



Reverse Voltage - 50 to 1000 Volts
Forward Current - 30.0 Amperes

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

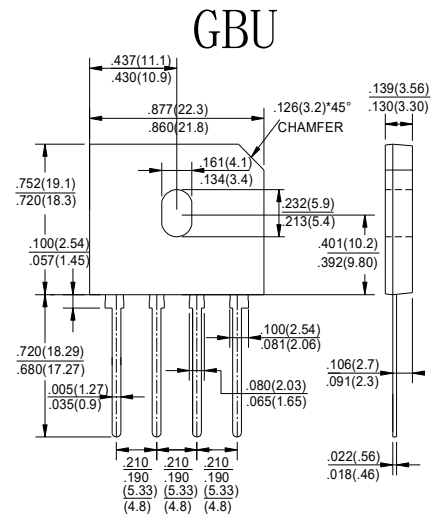
Mechanical Data

Case : Molded plastic body

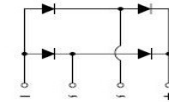
Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

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 30005	GBU 3001	GBU 3002	GBU 3004	GBU 3006	GBU 3008	GBU 3010	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	$I_{(AV)}$	30.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	350.0							A
Rating for fusing ($t=8.3ms, T_A=25^\circ C$)	I_t^2	508							A^2_s
Maximum instantaneous forward voltage at 15.0A	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	55.0							pF
Typical thermal resistance	$R_{\theta JA}$	26							$^\circ C/W$
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 4.0V D.C.
2. Mounted on glass epoxy PC board with 1.3mm² solder pad.
3. Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink



Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

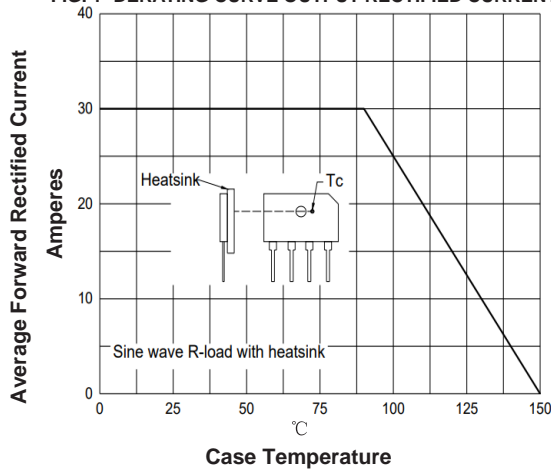


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

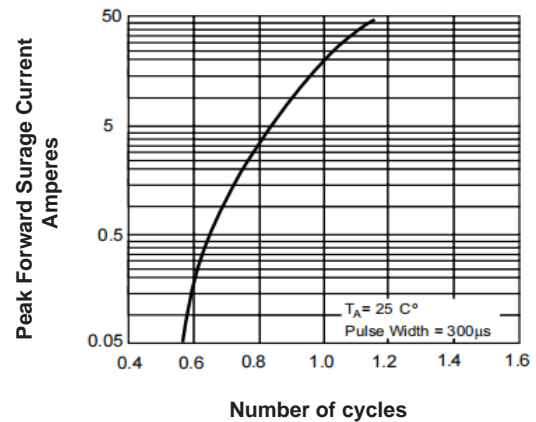


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

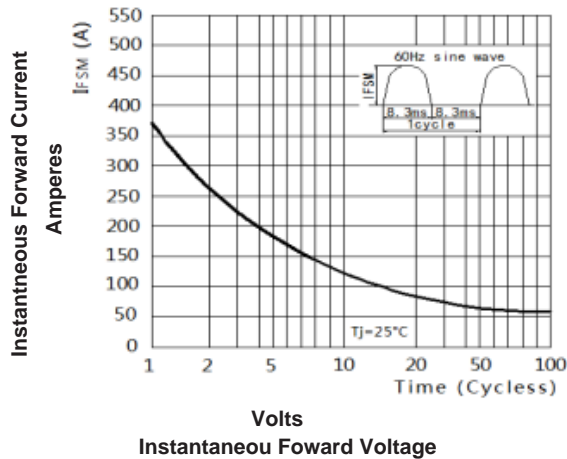
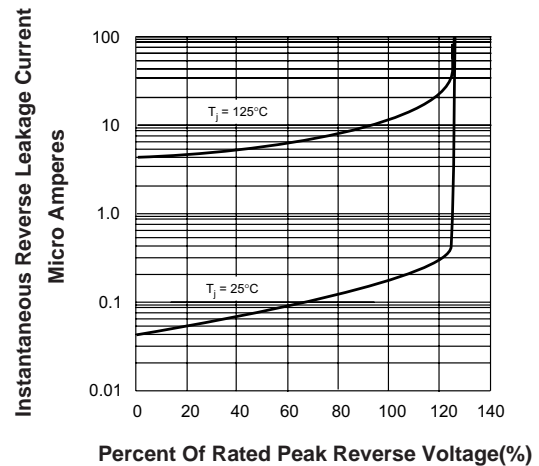


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Device	Package	Shipping
GBU30005-GBU3010	GBU	500 Units/Box