

**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 10 A**

### Features

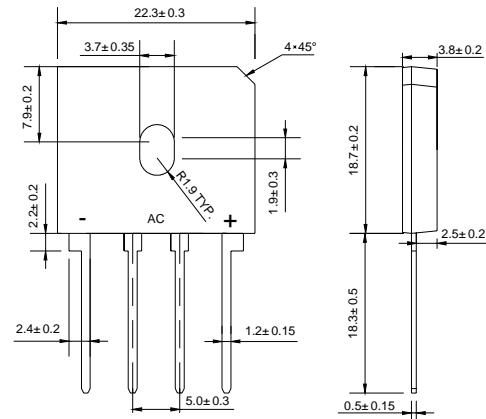
- High Reliability
- High Current Capability
- Low Forward Voltage Drop
- Glass Passivated Die Construction
- High Surge Current Capability
- Ideal for Printed Circuit Boards

### Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 4.0 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



**GBU**



Dimensions in millimeters

### Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	GBU10A	GBU10B	GBU10D	GBU 10G	GBU10J	GBU10K	GBU10M	Unit
Maximum recurrent 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 $T_c=100$ output current	$I_{F(AV)}$	10							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	$I_{FSM}$	200							A
Maximum instantaneous forward voltage at 5.0 A	$V_F$	1.1							V
Maximum 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 per leg (note 3)	$C_J$	211			94				pF
Typical thermal resistance per leg (note 2)	$R_{\theta JA}$	21							$^\circ\text{C}/\text{W}$
(note 1)	R	2.2							
Operating junction temperature range	$T_J$	- 55 ---- + 150							$^\circ\text{C}$
Storage temperature range	$T_{STG}$	- 55 ---- + 150							$^\circ\text{C}$

NOTE: 1. Unit case mounted on 3.2x3.2x0.12" thick (6.2x8.2x0.3cm) Al. Plate.

2. Units mounted in free air, no heat sink on P.C.B., 0.5x0.5"(12x12mm) copper pads, 0.375"(9.5mm) lead length.

3. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts.



FIG.1 – DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

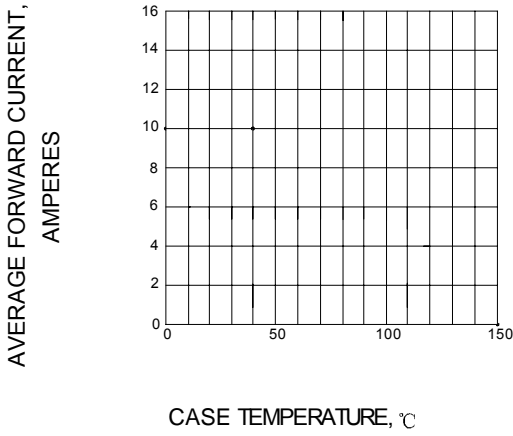


FIG.2 – TYPICAL FORWARD CHARACTERISTIC

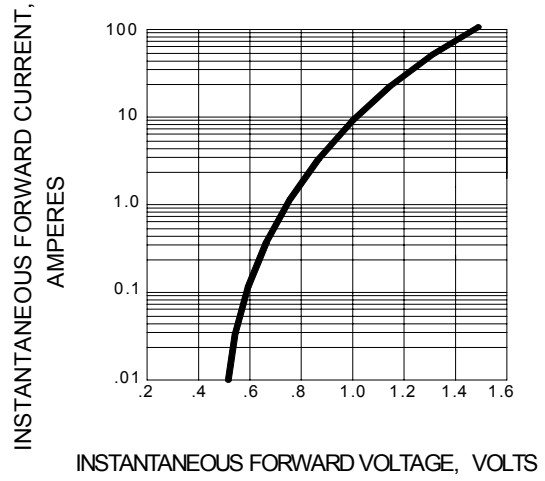


FIG.3 – MAXIMUM NON-REPETITIVE PEAK FORWARD DURGE CURRENT

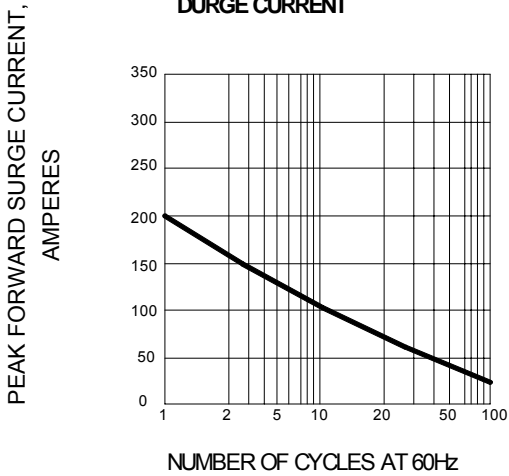


FIG.4 – TYPICAL REVERSE CHARACTERISTIC

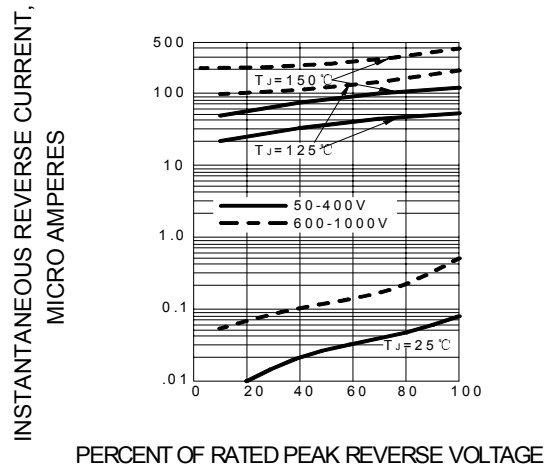


FIG.5 – TYPICAL JUNCTION CAPACITANCE PER LEG

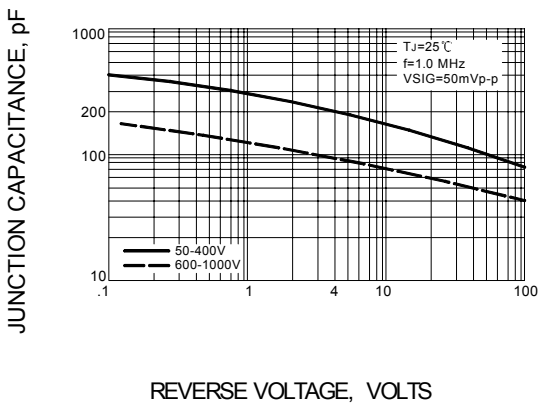


FIG.6 – TYPICAL TRANSIENT THERMAL IMPEDANCE

