

VOLTAGE RANGE: 50 - 1000V
CURRENT: 25.0A

Features

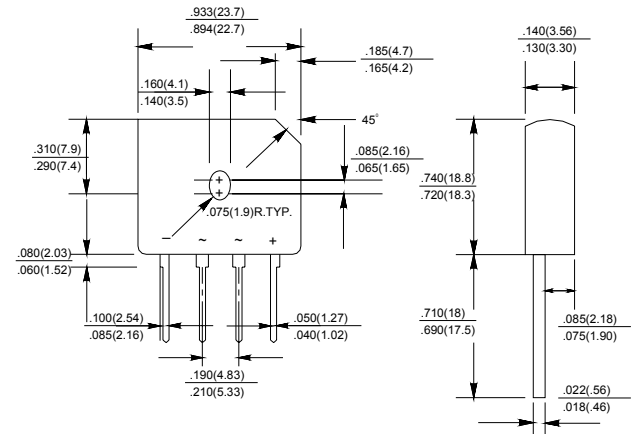
- High Reliability
- High Current Capability
- Low Forward Voltage Drop
- Glass Passivated Die Construction
- High Surge Current Capability
- Ideal for Printed Circuit Boards

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



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	GBU25A	GBU25B	GBU25D	GBU25G	GBU25J	GBU25K	GBU25M	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 Tc=100℃ output current	I _{F(AV)}	25.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I _{FSM}	240.0							A
Maximum instantaneous forward voltage at 12.5 A	V _F	1.0							V
Maximum reverse current @T _A =25℃ at rated DC blocking voltage @T _A =125℃	I _R	5.0 500.0							μA mA
Typical junction capacitance per leg (note 3)	C _J	211				94			pF
Typical thermal resistance per leg (note 2) (note 1)	R _{θJA} R _{θJC}	21.0 2.2							℃/W
Operating junction temperature range	T _J	- 55 ---- + 150							℃
Storage temperature range	T _{STG}	- 55 ---- + 150							℃

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

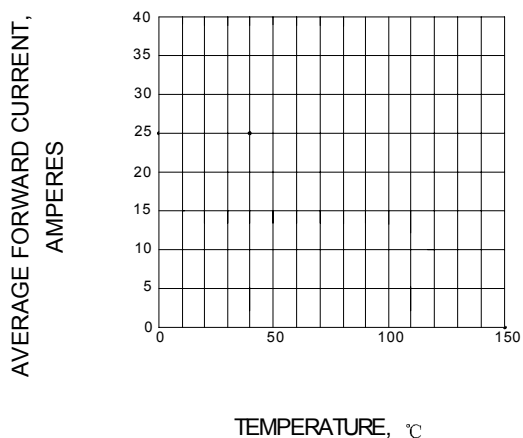


FIG.2 – TYPICAL FORWARD CHARACTERISTIC

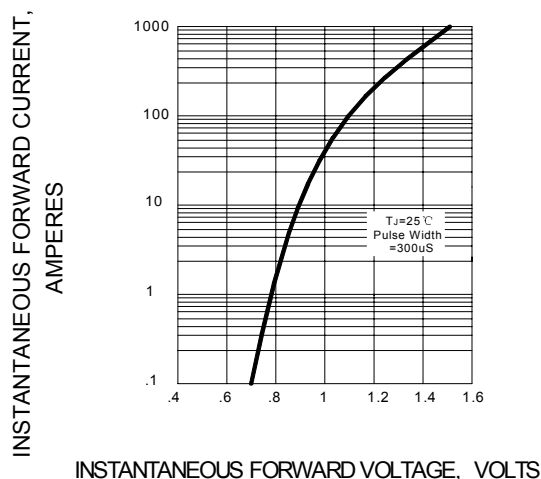


FIG.3 – MAXIMUM NON-REPETITIVE PEAK FORWARD DURGE CURRENT

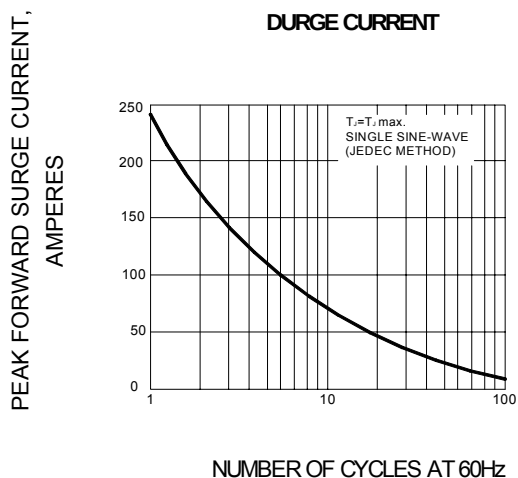


FIG.4 – TYPICAL REVERSE CHARACTERISTIC

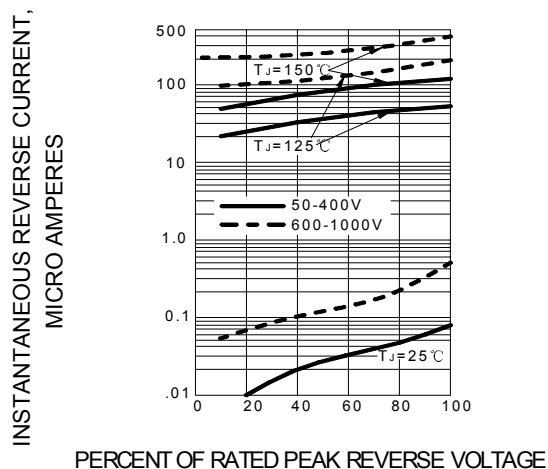


FIG.5 – TYPICAL JUNCTION CAPACITANCE PER LEG

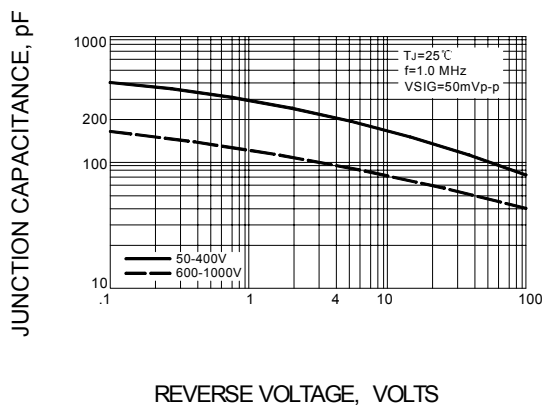


FIG.6 – TYPICAL TRANSIENT THERMAL IMPEDANCE

