

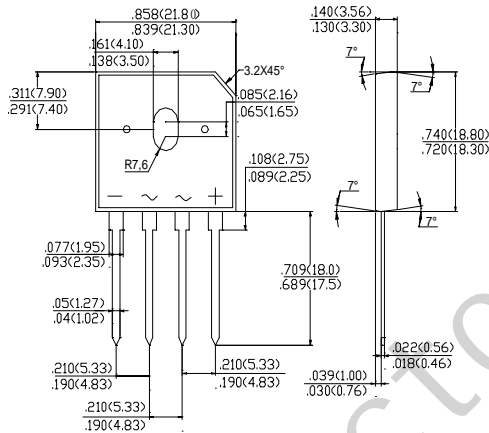
FEATURES

- Glass passivated chip junction
- Reliable low cost construction utilizing molded plastic technique
- Ideal for printed circuit board
- Low forward voltage drop
- Low reverse leakage current
- High surge current capability

MECHANICAL DATA

- Case: Molded plastic, GBU
- Epoxy: UL 94V-O rate flame retardant
- Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed
- Mounting position: Any
- Weight: 0.15ounce, 4.0gram

CURRENT: 8.0Amps VOLTAGE: 50 ~ 1000 V



GBU
Unit:inch(mm)

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, derate current by 20%.

	Symbols	GBU8005	GBU801	GBU802	GBU804	GBU806	GBU808	GBU810	Units
Maximum Recurrent 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 $T_C=100^\circ\text{C}$ (Note 1)	$I_{(AV)}$	8.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	200							Amp
Maximum Forward Voltage at 8.0A DC and 25°C	V_F	1.1							Volts
Maximum Reverse Current at Rated DC Blocking Voltage at $T_A=25^\circ\text{C}$ and $T_A=125^\circ\text{C}$	I_R	5.0 500							uAmp
Typical Junction Capacitance (Note 3)	C_J	255				125			pF
Typical Thermal Resistance (Note 4)	$R_{\theta JA}$	21							°C/W
Typical Thermal Resistance (Note 4)	$R_{\theta JC}$	2.2							°C/W
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to +150							°C

NOTES:

- 1- Units case mounted on 3.2 x 3.2 x 0.12" thick (8.2 x 8.2 x 0.3cm) Al plate heatsink
- 2- Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screws
- 3- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 4- Units mounted in free air, no heatsink on P.C.B., 0.5 x 0.5" (12 x 12mm) copper pads, 0.375" lead length

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 – Derating Curve Output Rectified Current

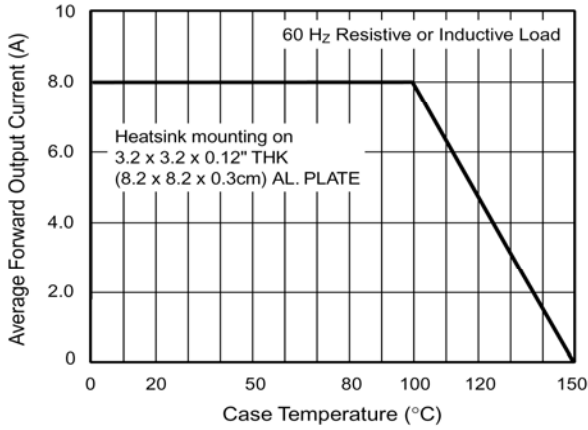


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg

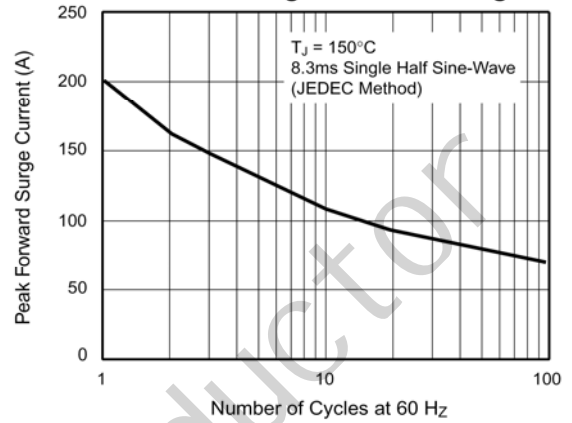


Fig. 3 – Typical Forward Characteristics Per Leg

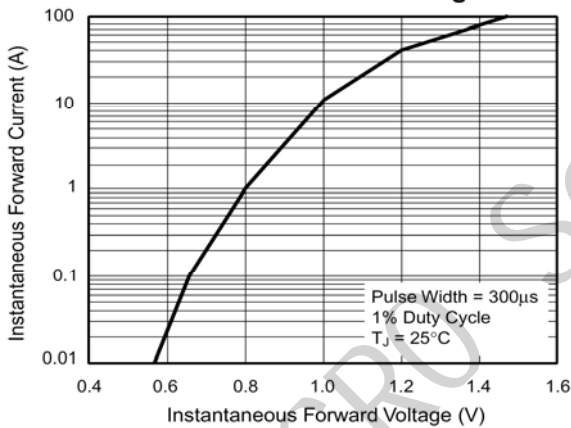


Fig. 4 – Typical Reverse Characteristics Per Leg

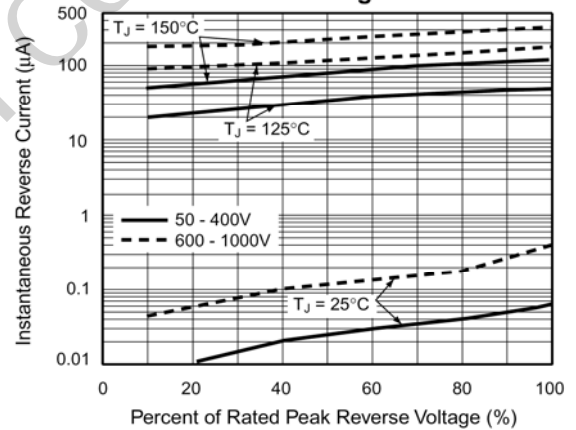


Fig. 5 – Typical Junction Capacitance Per Leg

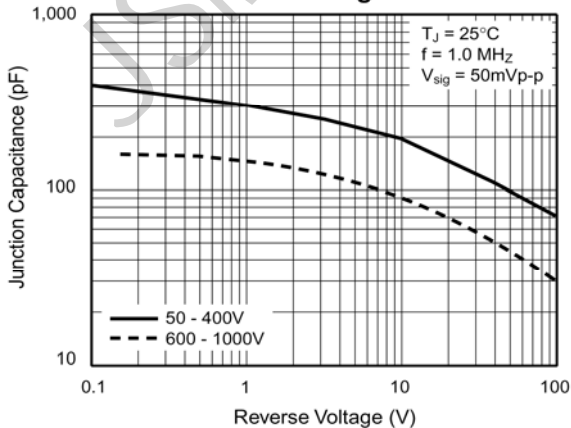


Fig. 6 – Typical Transient Thermal Impedance Per Leg

