

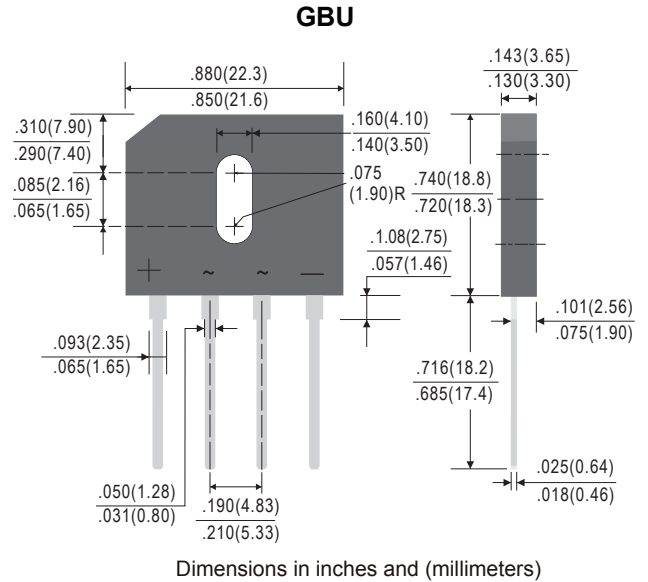
6 AMP GLASS PASSIVATED BRIDGE RECTIFIER

FEATURES

- * Ideal for printed circuit board
- * Surge overload rating: 175 Amperes peak
- * Mounting position: Any
- * Weight: 4 grams
- *

MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-0



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%

CHARACTERISTICS	SYMBOL			GBU615			UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}			1200			Volts
Maximum RMS Voltage	V_{RMS}			840			Volts
Maximum DC Blocking Voltage	V_{DC}			1200			Volts
Maximum Average Forward Current $T_c=90^\circ\text{C}$ Rectified Output Current at $T_A=25^\circ\text{C}$ (Fig.1)	$I_{(AV)}$			6.0			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}			175			Amps
Rating for fusing ($t < 8.3\text{ms}$)	I^2t			127			A^2sec
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$			8.6			$^\circ\text{C}/\text{W}$
(Note 3)	$R_{\theta JC}$			3.1			
Typical Junction Capacitance (Note 1)	C_J			94			pF
Operating Temperature Range	T_J			-55 to +150			$^\circ\text{C}$
Storage Temperature Range	T_{STG}			-55 to +150			$^\circ\text{C}$
Forward Voltage Range at 3.0A DC	V_F			1.0			Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	I_R	@ $T_A=25^\circ\text{C}$		5.0			μAmps
		@ $T_A=125^\circ\text{C}$		500			

NOTES :1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

2. Device mounted in free air, no heatsink, P.C.B at 0.375"(9.5MM) lead length with 0.5 x 0.5"(12 x 12MM) copper pads.

3. Device mounted on a 2.6 x 1.4' x 0.06' t/jick (6.5 x 3.5 x 0.15 cm) AL plate.

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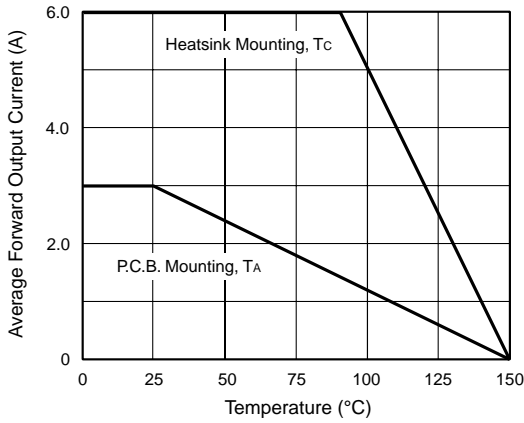


Figure 1. Derating Curve Output Rectified Current

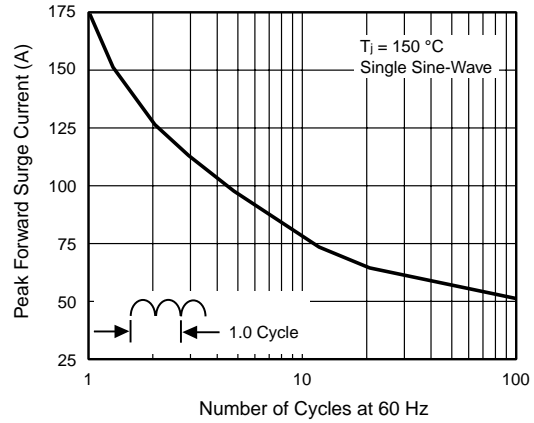


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

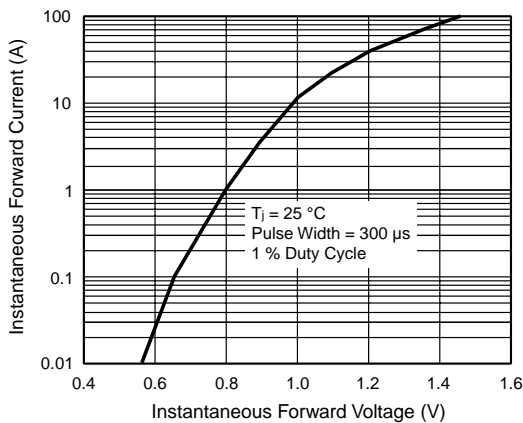


Figure 3. Typical Forward Characteristics Per Diode

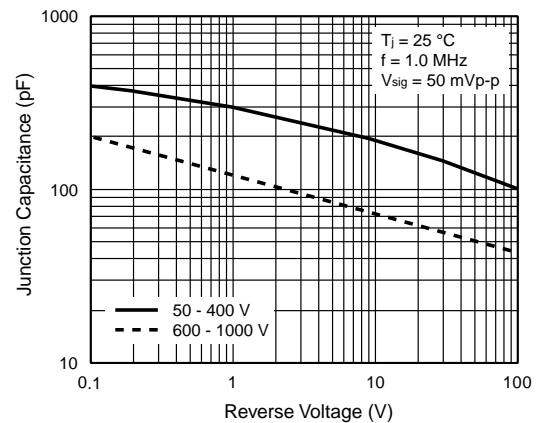


Figure 5. Typical Junction Capacitance Per Diode

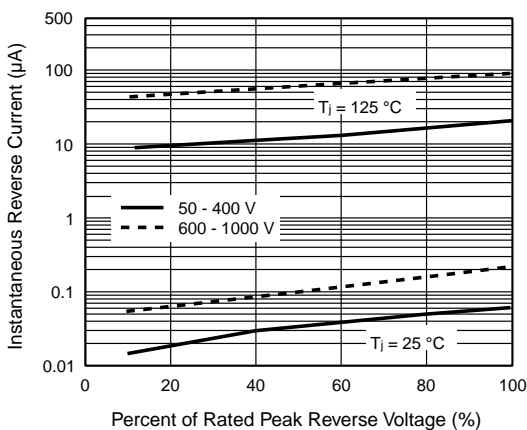


Figure 4. Typical Reverse Leakage Characteristics Per Diode

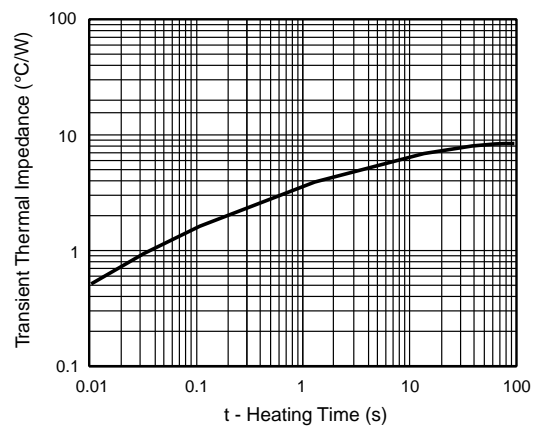


Figure 6. Typical Transient Thermal Impedance