WILLAS

RoHS COMPLIANT

GBU8J THRU GBU8M

8 AMPS GLASS PASSIVATED BRIDGE RECTIFIER- 600~1000Volts

GBU PACKAGE

FEATURES

* Ideal for printed circuit board
* Surge overload rating: 180 Amperes peak
* Moisture Sensitivity Level 1
* Pb-Free Package is available

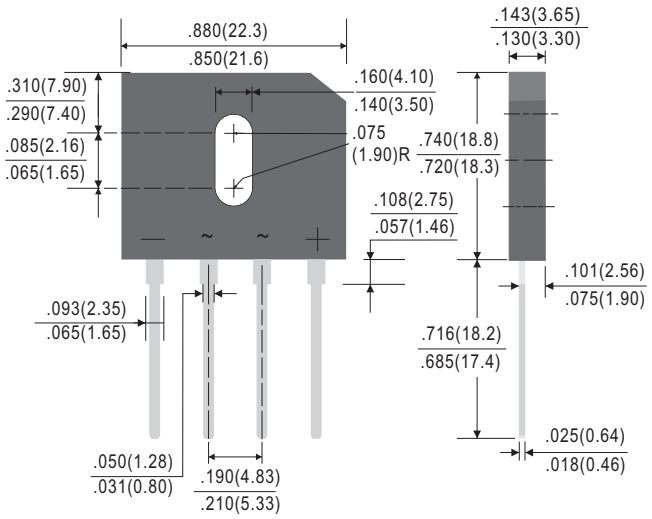
RoHS product for packing code suffix ”G”,

Halogen free product for packing code suffix "H" .

MECHANICAL DATA

* Case: Molded plastic
* UL listed the recognized component directory, file #E195711
* Epoxy: Device has UL flammability classification 94V-O
* Mounting position: Any
* Teminals:Solder plated, solderable per MIL-STD-750,Method 2026.
* Weight: 4 grams (Approximated)

GBU



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive of inductive load.
For capacitive load, derate current by 20%

CHARACTERISTICS		SYMBOL	GBU8J	GBU8K	GBU8M	UNIT
Mark Code		SYMBOL	GBU8J	GBU8K	GBU8M	UNIT
Maximum Recurrent Peak Reverse Voltage		VRRM	600	800	1000	Volts
Maximum RMS Voltage		VRMS	420	560	700	Volts
Maximum DC Blocking Voltage		VDC	600	800	1000	Volts
Maximum Average Forward T_C=60℃		$I_{(AV)}$	8.0			Amps
Rectified Output Current at T_A=25℃ (see Fig.1)			3.0			
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		IFSM	180			Amps
Rating for fusing (t<8.3ms)		I^2t	134.4			A^2sec
Typical Thermal Resistance (Note 2)		$R\Theta_{JA}$	20			℃/W
(Note 3)		$R\Theta_{JC}$	4			
Typical Junction Capacitance (Note 1)		C_J	94			PF
Operating Temperature Range		T_J	-55 to +150			℃
Storage Temperature Range		T_{STG}	-55 to +150			℃
Forward Voltage Range at 8.0A DC		VF	1.1			Volts
Maximum Average Reverse Current at	@TA=25℃	IR	5.0			μAmps
Rated DC Blocking Voltage	@TA=125℃		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' tjick (6.5 x 3.5 x 0.15 cm) AL plate.

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RATING AND CHARACTERISTICS CURVES

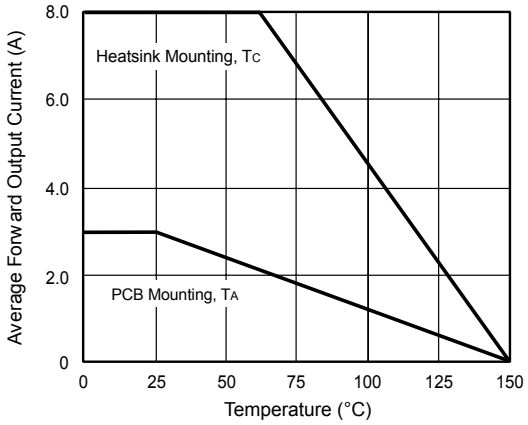

Figure 1. Derating Curve Output Rectified Current

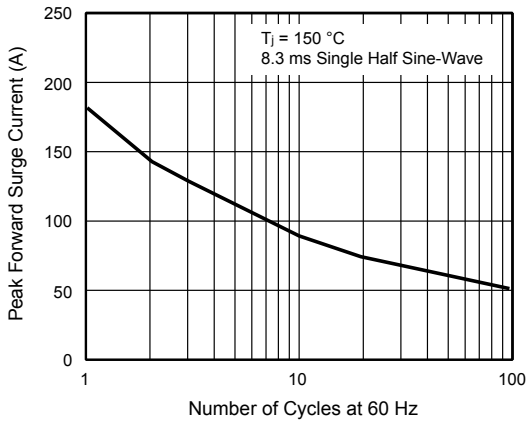

Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

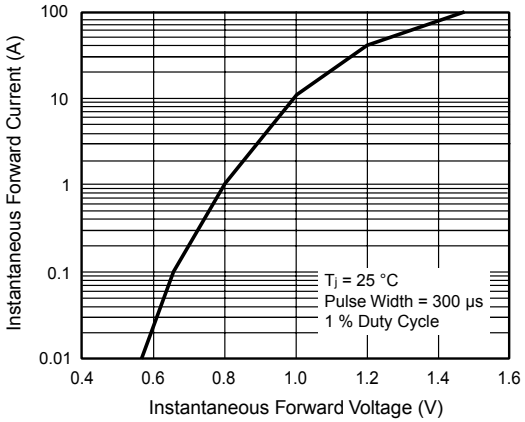

Figure 3. Typical Forward Characteristics Per Diode

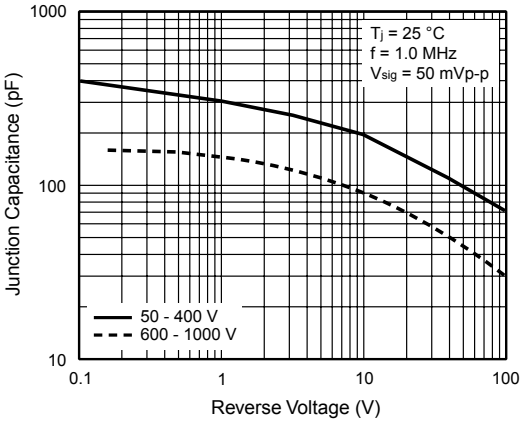

Figure 5. Typical Junction Capacitance Per Diode

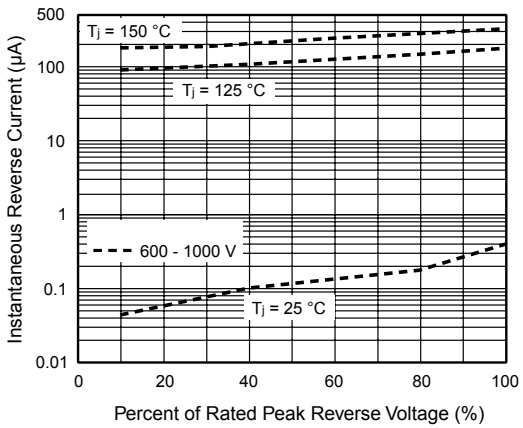

Figure 4. Typical Reverse Leakage Characteristics Per Diode

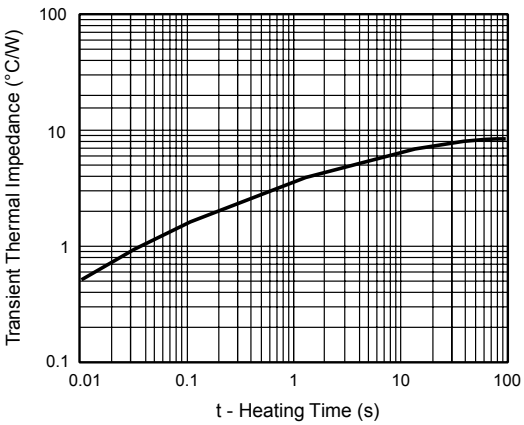

Figure 6. Typical Transient Thermal Impedance Per Diode

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Ordering Information:

Device PN	Packing
Part Number - $^{(1)}$G$^{(2)}$-WS	Tube Packing:20pcs/Tube; 1000pcs/Box

Note: 1. Packing code: Empty is Tube Packing

2. RoHS product for packing code suffix ”G”, Halogen free product for packing code suffix "H" .