GLASS PSSIVATED SINGLE-PHASE BRIDGE RECTIFIER

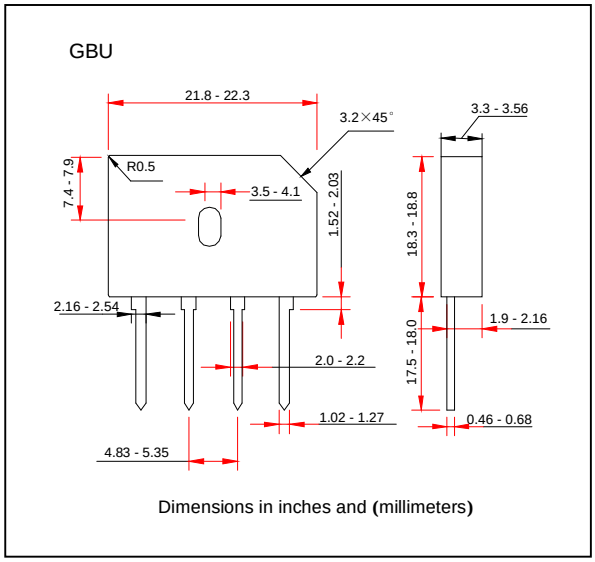
GBU8A THRU GBU8M

VOLTAGE RANGE **50 to 1000 Volts**

CURRENT **8.0 Amperes**

FEATURES

- Plastic package has Underwriters Laboratory Flammability Glassification 94V-0
- High case dielectric strength of 1500 VRMS
- Ideal for printed circuit boards
- Glass passivated chip junctions
- High surge current capability
- High temperature soldering guaranteed 260℃/10 seconds, 0.375"(9.5mm) lead length at 5 lbs. (2.3kg) tension



MECHANICAL DATA

- Case: molded plastic body over passivated junctions
- Terminal: Plated leads solderable per MIL-STD-750 Method 2026
- Mounting position: Any (Note 2)
- Mounting Torque: 5 in-1b.Max.
- Weight: 0.15 ounce,4.0 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	GBU 8A	GBU 8B	GBU 8D	GBU 8G	GBU 8J	GBU 8K	GBU 8M	UNIT
Maximum Reverse Peak Repetitive 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	100	Volts
Maximum Average Forward T_C=100℃(Note 1,2) Rectified Output Current, At	$I_{(AV)}$	8.0							Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	I_{FSM}	175							Amps
Rating for Fusing (t＜8.3ms)	I^2t	127							A^2s
Maximum Instantaneous Forward Voltage drop Per leg at 4.0A	V_F	1.0							Volts
Maximum Reverse Current at rated DC blocking voltage per element T_A=25℃	I_R	5.0							Amps
Maximum Reverse Current at rated DC blocking voltage per element T_A=125℃	I_R	500							mAmps
Typical Junction Capacitance (Note 4)	C_J	211				94			pF
Typical Thermal Resistance (Note 2)	R_{JA}	21							℃/W
Typical Thermal Resistance (Note 1)	R_{JL}	2.2							℃/W
Operating and Storage Temperature Range	T_J ,T_{STG}	(-55 to +150)							℃

Notes: 1. Unit mounted on 2.6×1.6×0.06" thick (6.5×3.5×0.15cm) AL. plate heatsink
2. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum Heat transfer with #6 screw
3. Units ,mounted in free air, no heatsink on P.C.B (12×12mm) copper pads, 0.375" lead length
3. Measured at 1.0 MHz and applied reverse voltage of 4.0 V

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CURRENT	**8.0 Ampere**

RATINGS AND CHARACTERISTIC CURVES GBU8A THRU GBU8M

FIG. 1- DERATING CURVE
OUTPUT RECTIFIED CURRENT

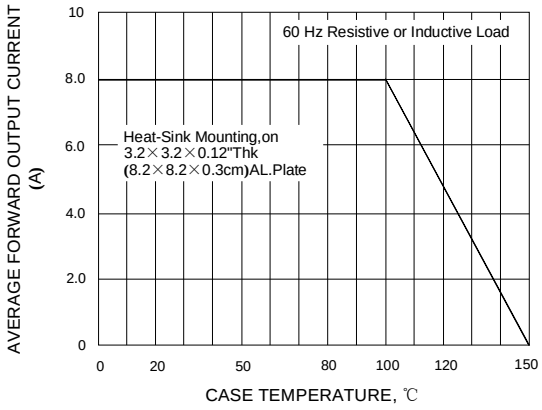

FIG. 2- MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER LEG

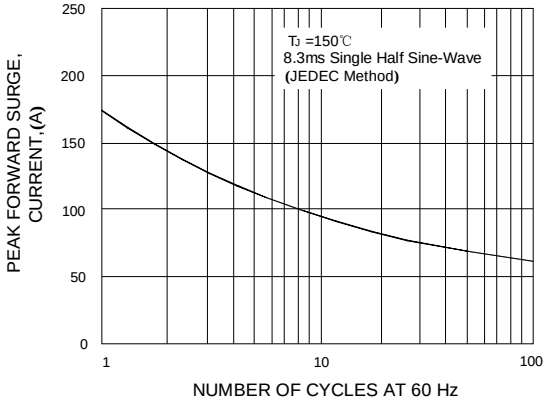

FIG. 3- TYPICAL FORWORD
CHARACTERISTICS PER LGE

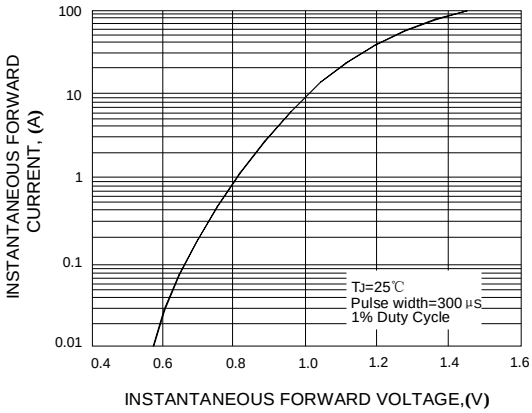

FIG. 4- TYPICAL REVERSE CHARACTERISTICS
PER LEG

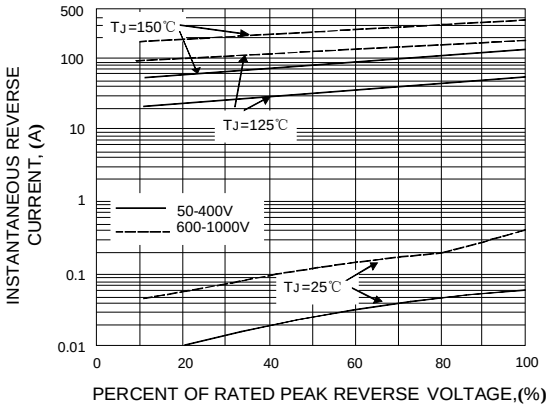

FIG. 5- TYPICAL JUNCTION CAPACITANCE
PER LEG

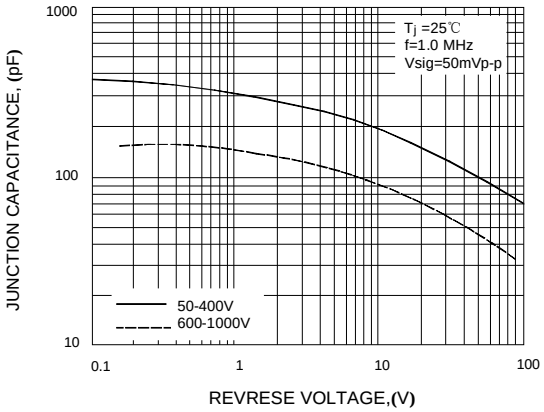

FIG. 6- TYPICAL TRANSIENT THERMAL
IMPEDANCE PER LEG