



## SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIER

### GBLA005 THRU GBLA10

**VOLTAGE RANGE**

**50 to 1000 Volts**

**CURRENT**

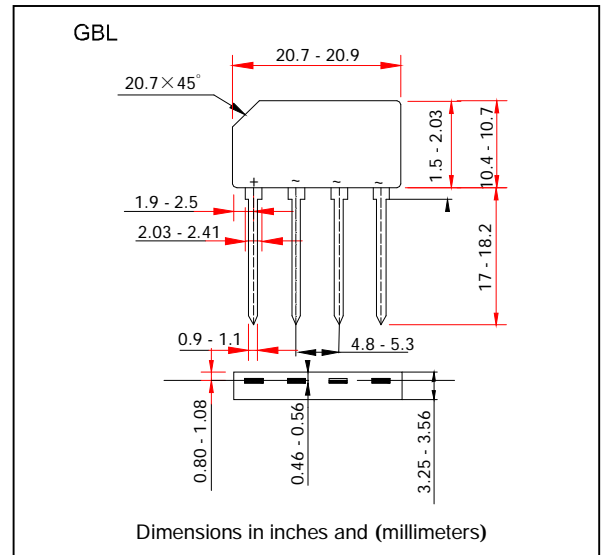
**4.0 Amperes**

#### FEATURES

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

#### MECHANICAL DATA

- Case: molded plastic body
- Terminal: Plated leads solderable per MIL-STD-750 Method 2026
- Mounting position: Any
- Weight: 0.071 ounce, 2.0 gram



#### 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	GBLA 005	GBLA 01	GBLA 02	GBLA 04	GBLA 06	GBLA 08	GBLA 10	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	1000	Volts
Maximum Average Forward Rectified Output Current, At $T_C=50^\circ C$ $T_A=40^\circ C$	$I_{(AV)}$	4.0(Note 1) 3.0(Note 2)							Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	120							Amps
Rating for Fusing ( $t < 8.3ms$ )	$I^2t$	60							$A^2s$
Maximum Instantaneous Forward Voltage drop Per Bridge element 4.0A	$V_F$	1.0							Volts
Maximum Reverse Current at rated DC blocking voltage per element	$T_A=25^\circ C$	5.0							$\mu A$
	$T_A=125^\circ C$	500							
Typical Junction Capacitance per leg (Note 3)	$C_J$	95.0			40.0				pF
Typical Thermal Resistance (Note 1)	$R_{JA}$	22							$^\circ C/W$
Typical Thermal Resistance (Note 2)	$R_{JL}$	10							$^\circ C/W$
Operating and Storage Temperature Range	$T_J, T_{STG}$	(-55 to +150)							$^\circ C$

- Notes:**
1. Unit mounted on 3.0×3.0×0.11” thick (7.5×7.5×0.3cm) AL. plate
  2. Unit mounted on P.C.B. at 0.375” (9.5mm) lead length and 0.5×0.5”(12×12mm) copper pads
  3. Measured at 1.0MHz and applied reverse voltage of 4.0 V



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## RATINGS AND CHARACTERISTIC CURVES GBLA005 THRU GBLA10

FIG. 1- DERATING CURVE  
OUTPUT RECTIFIED CURRENT

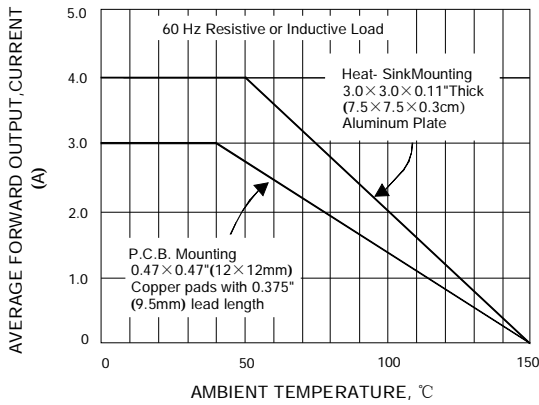


FIG. 2- MAXIMUM NON-REPETITIVE PEAK  
FORWARD SURGE CURRENT PER LEG

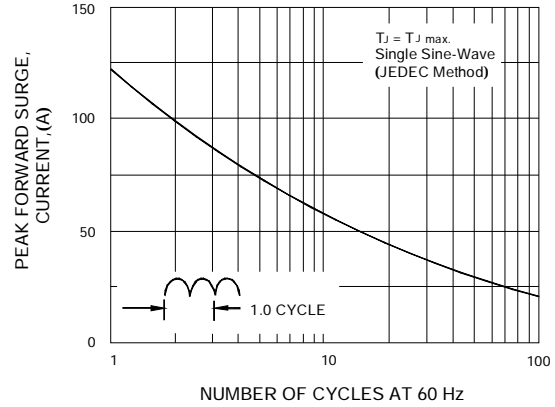


FIG. 3- TYPICAL FORWARD VOLTAGE  
CHARACTERISTICS PER LEG

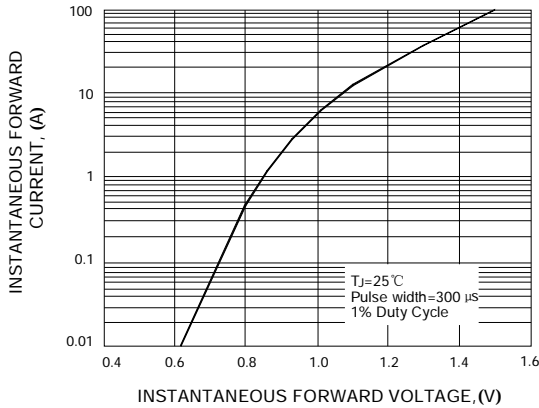


FIG. 4- TYPICAL REVERSE LEAKAGE  
CHARACTERISTICS PER LEG

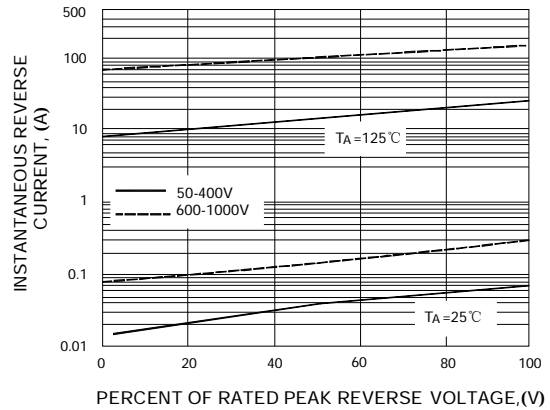


FIG. 5- TYPICAL JUNCTION CAPACITANCE  
PER LEG

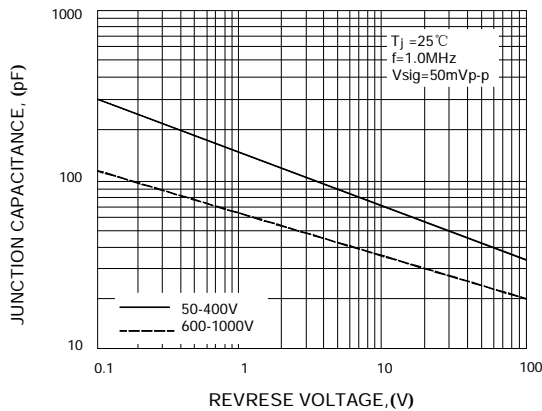


FIG. 6- TYPICAL TRANSIENT THERMAL  
IMPEDANCE PER LEG

