



## SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIER

**GBL005 THRU GBL10**

**VOLTAGE RANGE**

**50 to 1000 Volts**

**CURRENT**

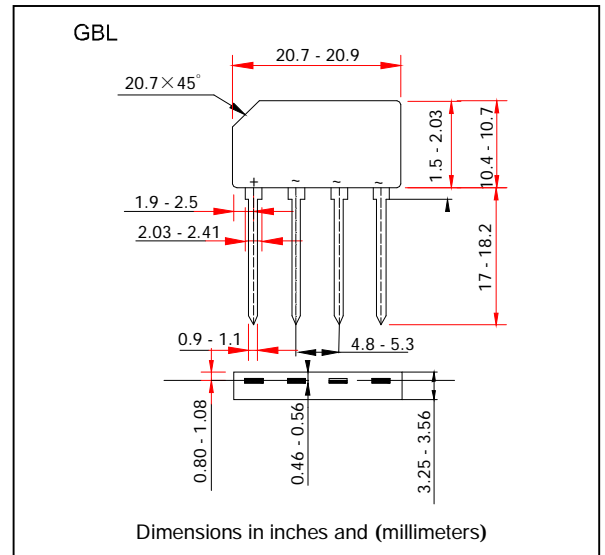
**4.0 Amperes**

### FEATURES

- Plastic package has UL flammability Classification 94V-0
- Glass passivated chip junctions
- High case dielectric strength
- High surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds, 0.375”(9.5mm) lead length

### MECHANICAL DATA

- Case: molded plastic body
- Terminal: Plated leads solderable per MIL-STD-750 Method 2026
- Mounting position: Any
- Weight: 0.15 ounce, 4.0 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	GBL 005	GBL 01	GBL 02	GBL 04	GBL 06	GBL 08	GBL 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 Current, At $T_C=50^\circ\text{C}$ (Note 1) $T_A=40^\circ\text{C}$ (Note 2)	$I_{(AV)}$	4.0						3.0		Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150								Amps
Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	93.0								$\text{A}^2\text{s}$
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	$I_R$	$T_A=25^\circ\text{C}$						5.0		$\mu\text{A}$
		$T_A=125^\circ\text{C}$						500		
Typical Junction Capacitance per leg (Note 3)	$C_J$	95.0				40.0				pF
Typical Thermal Resistance (Note 1) (Note 2)	$R_{JA}$	22.0								$^\circ\text{C}/\text{W}$
	$R_{JC}$	3.5								
Operating Junction Temperature Range	$T_J$	(-55 to +150)								$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	(-55 to +150)								$^\circ\text{C}$

- 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 GBL005 THRU GBL10

FIG. 1- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

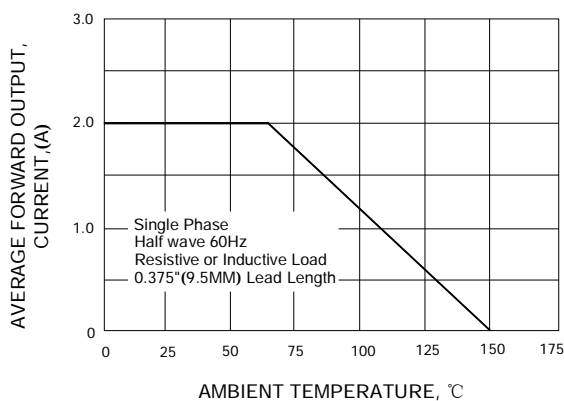


FIG. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

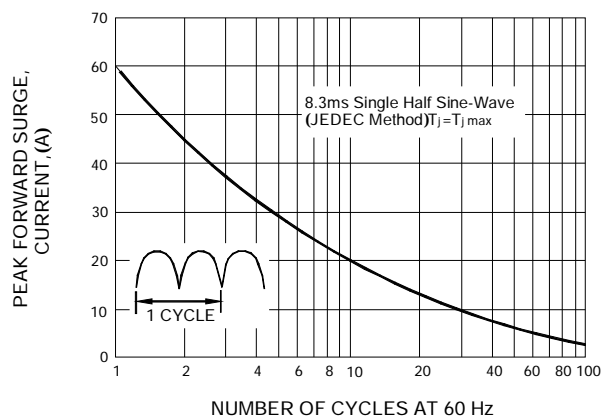


FIG. 3- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

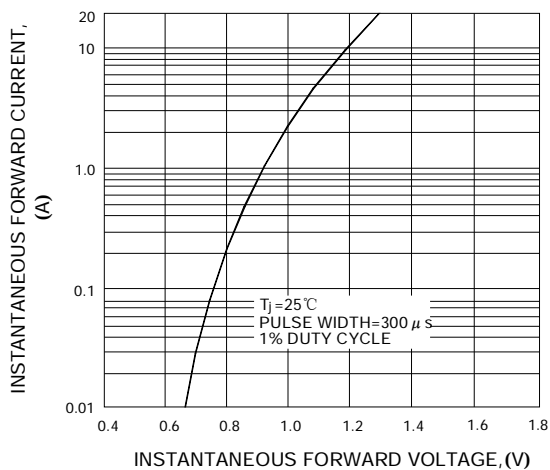


FIG. 4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

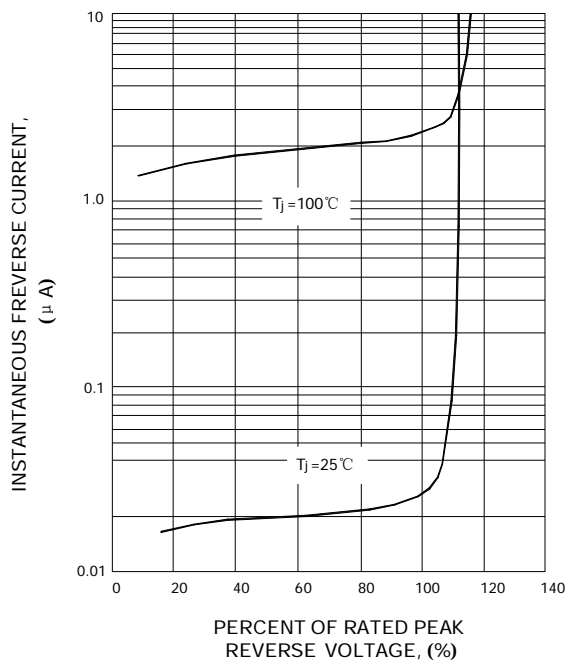


FIG. 5- TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

