

SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIER

GBL005 THRU GBL10

VOLTAGE RANGE

50 to 1000 Volts

CURRENT

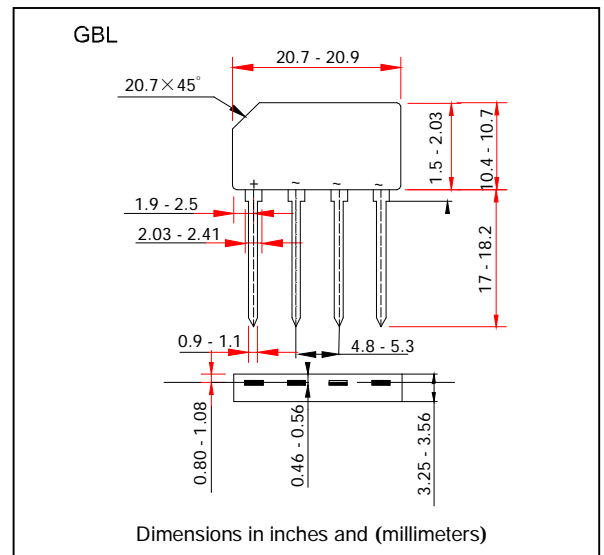
4.0 Amperes

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			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			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	I_R					5.0			μA
						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

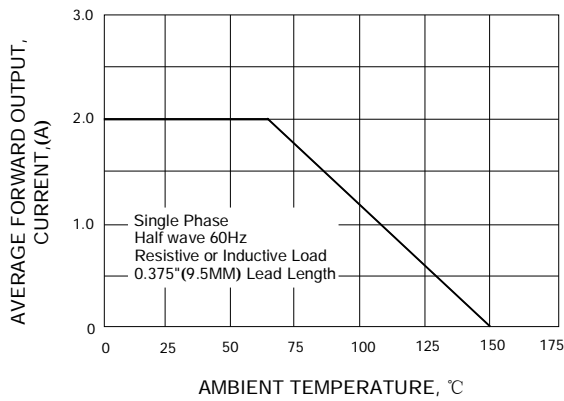


FIG. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

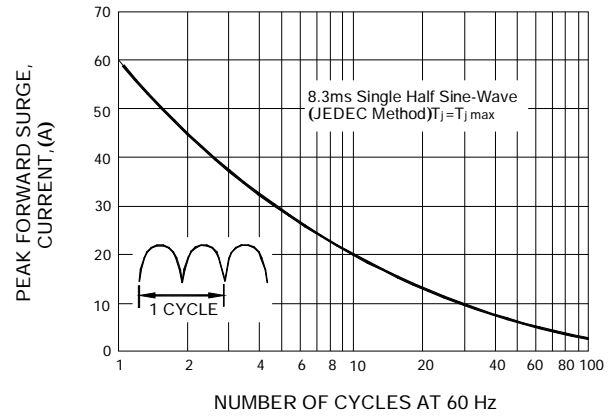


FIG. 3- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

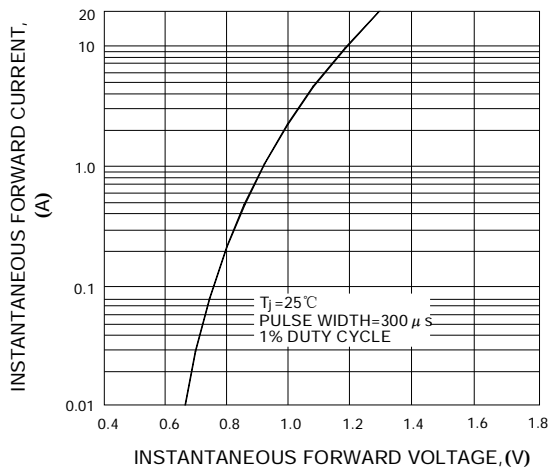


FIG. 4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

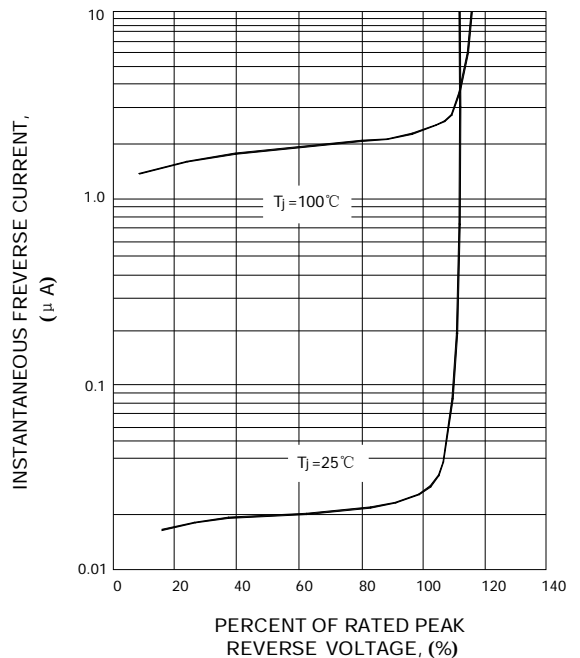


FIG. 5- TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

