



## SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

**GBJ10005 THRU GBJ1010**

**VOLTAGE RANGE  
CURRENT**

**50 to 1000 Volts  
10.0 Ampere**

### FEATURES

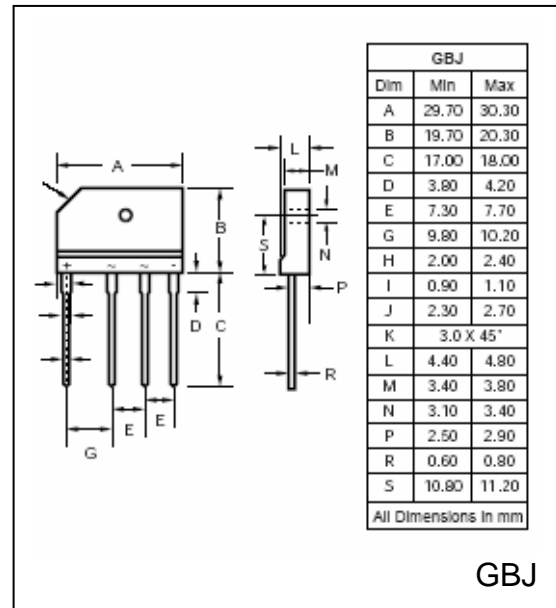
- Plastic package has UL flammability Classification 94V – 0
- Glass passivated chip junction
- High case dielectric strength of 1500 V<sub>RMS</sub>
- High surge current capability
- Ideal for printed circuit boards
- High temperature soldering guaranteed: 260 °C /10 seconds, 0.375” (9.5mm) lead length

### MECHANICAL DATA

- Case: Molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750 Method 2026
- Mounting position: any (Note 3)
- Mounting Torque: 6 in-lbs max.
- Weight: 0.26 ounce, 7.4 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	GBJ 10005	GBJ 1001	GBJ 1002	GBJ 1004	GBJ 1006	GBJ 1008	GBJ 1010	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current,	I <sub>(AV)</sub>	At T <sub>C</sub> = 100°C (Note 1)							Amps
		At T <sub>A</sub> = 25°C (Note 2)							
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	10							Amps
Rating for Fusing (t<8.3mS)	I <sup>2</sup> t	5.0							A <sup>2</sup> s
Maximum Instantaneous Forward Voltage drop per Bridge element 5.0A	V <sub>F</sub>	185							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	I <sub>R</sub>	At T <sub>A</sub> = 25°C							μA
		At T <sub>A</sub> = 125°C							
Typical Junction Capacitance, per leg (Measured at 1.0MHz and applied reverse voltage of 4.0V)	C <sub>J</sub>	142							pF
Typical Thermal Resistance (Note 2 and 3)	R <sub>θJA</sub>	1.0							°C/W
Operating Junction Temperature Range	T <sub>J</sub>	10							°C
Storage Temperature Range	T <sub>STG</sub>	250							°C
		60							
		22							
		(-55 to +150)							
		(-55 to +150)							

### Notes:

1. Unit mounted on AL Plate heatsink
2. Unit mounted on PCB with 0.5” x 0.5” (12mm x 12mm) copper pads on 0.375” (9.5mm) lead length
3. Recommended mounting position is to bolt down on heatsink with silicon thermal compound for maximum heat transfer with #6 screw



# RATINGS AND CHARACTERISTIC CURVES GBJ10005 THRU GBJ1010

