DATA SHEET

GBJ10A~GBJ10K

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE - 50 to 800 Volts CURRENT - 10.0 Amperes

FEATURES

- Plastic material has Underwriters Laboratory Flammability Classification 94V-O
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Surge overload rating: 200 Amperes peak
- High temperature soldering guaranteed:
  260°C/10 seconds/.375"(9.5mm) lead length at 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: Reliable low cost construction utilizing molded plastic technique

Terminals: Leads solderable per MIL-STD-202, Method 208

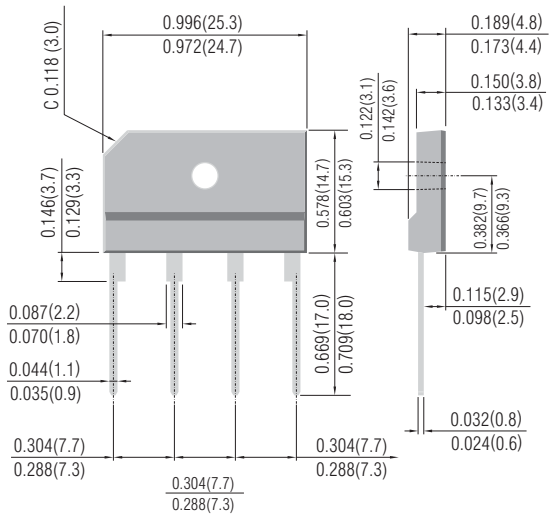
Mounting position: Any

Mounting torque: 5 in. lb. Max.

Weight: 0.15 ounce, 4.0 grams

GBJ

Unit: inch (mm)



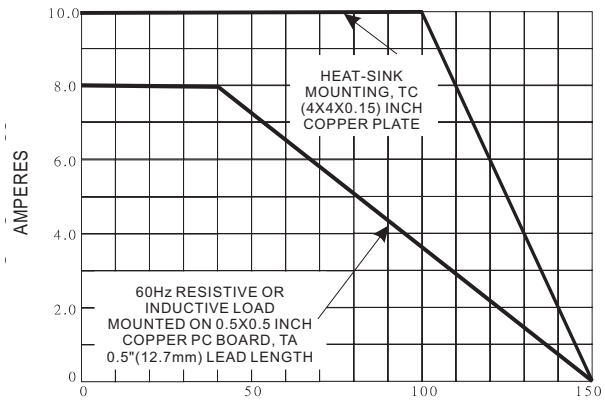
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°Cambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.
For Capacitive load derate current by 20%.

	GBJ10A	GBJ10B	GBJ10D	GBJ10G	GBJ10J	GBJ10K	UNIT
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	V
Maximum RMS Input Voltage	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	V
Maximum Average Forward T_C=100°C Rectified Output Current T_A= 45°C	10.0 8.0						A
I^2t Rating for fusing (t<8.3ms)	166						A^2sec
Peak Forward Surge Current single sine-wave superimposed on rated load (JEDEC method)	200						Apk
Maximum Instantaneous Forward Voltage Drop per element at 5.0A	1.0						Vpk
Maximum Reverse Leakage at rated T_A=25° CDc Blocking Voltage per element T_C=100°C	5 500						μA μA
Typical Thermal Resistance per leg(Note 2) RθJA	18.0						°C / W
Typical Thermal Resistance per leg(Note 3) RθJC	3.0						°C / W
Operating and Storage Temperature Range, T_J,TSTG	-55 to +150						°C

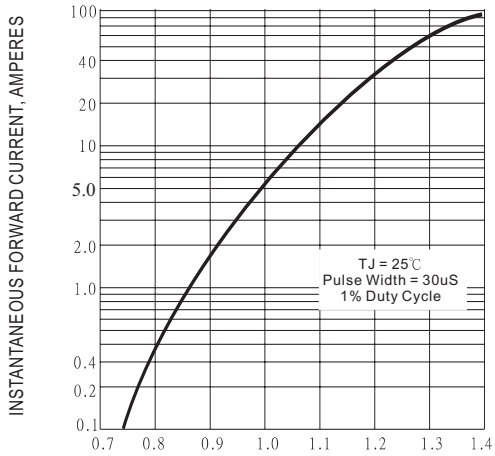
NOTES:

1. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw.
2. Units Mounted in free air, no heatsink, P.C.B at 0.375"(9.5mm) lead length with 0.5 x 0.5"(12 x 12mm)copper pads.
3. Units Mounted on a 3.0 x 3.0" x 0.11" thick (7.5 x 7.5 x 0.3cm) AL plate.



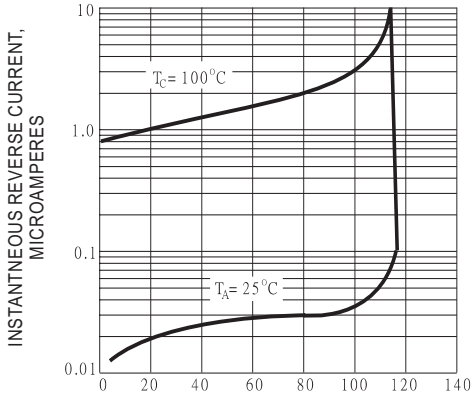
TEMPERATURE ℃

Fig.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT



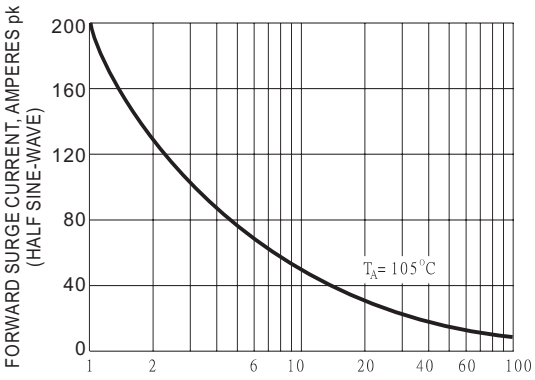
INSTANTANEOUS FORWARD VOLTAGE, VOLT

Fig.2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT



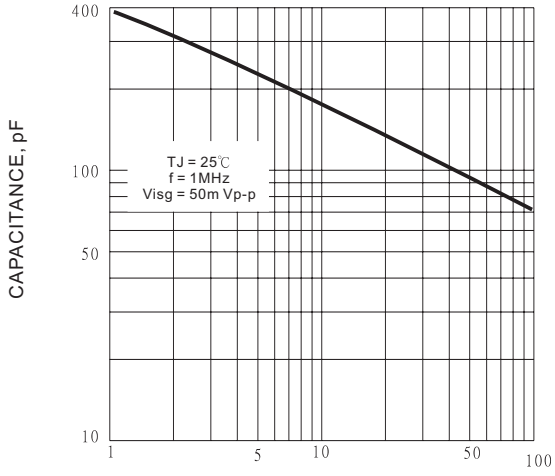
PERCENT OF PEAK REVERSE VOLTAGE

Fig.3 - TYPICAL REVERSE CHARACTERISTICS



NO. OF CYCLES AT 62Hz

Fig.4 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



REVERSE VOLTAGE, VOLTS