GBU6A THRU GBU6K

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE - 50 to 800 Volts CURRENT - 6.0 Amperes

Recongnized File #E111753

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Surge overload rating: 175 Amperes peak
- High temperature soldering guaranteed: 260 ¢J/10 seconds/.375”(9.5mm) lead length at 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: Reliable low cost construction utilizing molded plastic technique

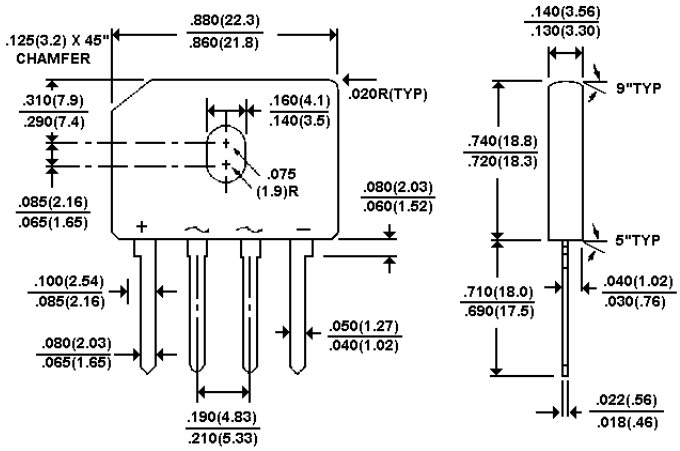
Terminals: Leads solderable per MIL-STD-202, Method 208

Mounting position: Any

Mounting torque: 5 in. lb. Max.

Weight: 0.15 ounce, 4.0 grams

GBU



Dimensions in inches and (millimeters)

MACXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 ¢J ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

For Capacitive load derate current by 20%.

	GBU6A	GBU6B	GBU6D	GBU6G	GBU6J	GBU6K	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	V_{RRM}
Maximum RMS Input Voltage	35	70	140	280	420	560	V_{RMS}
Maximum DC Blocking Voltage	50	100	200	400	600	800	V_{DC}
Maximum Average Forward T_C=100 ¢J Rectified Output Current at	6.0						$A_{(AV)}$
I^2t Rating for fusing (t<8.3ms)	127						A^2Sec
Peak Forward Surge Current single sine-wave superimposed on rated load (JEDEC method)	175						A_{PK}
Maximum Instantaneous Forward Voltage Drop per element at 6.0A	1.0						V_{PK}
Maximum Reverse Leakage at rated T_A=25 ¢J Dc Blocking Voltage per element T_C=100 ¢J	5.0 500						£g A £g A
Typical Thermal Resistance per leg (Note 2) R £KJA Typical Thermal Resistance per leg (Note 3) R £KJL	8.6 3.1						¢J/W
Operating and Storage Temperature Range, T_J,T_{STG}	-55 TO +150						¢J

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 ¡Ñ0.5” (12 ¡Ñ12mm)copper pads.
3. Units Mounted on a 2.6 ¡Ñ1.4” ¡Ñ0.06” thick (6.5 ¡Ñ3.5 ¡Ñ0.15cm) AL plate.

RATING AND CHARACTERISTIC CURVES

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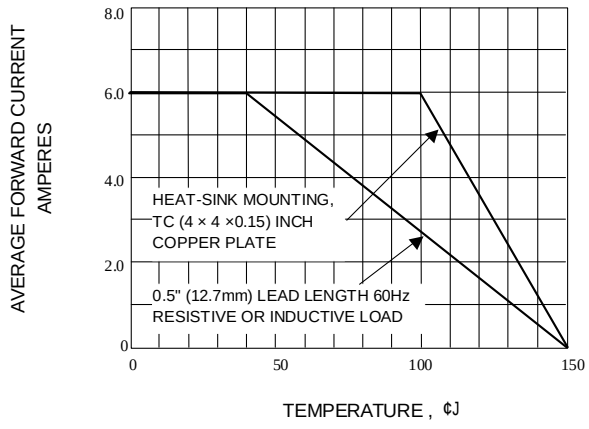

Fig. 1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

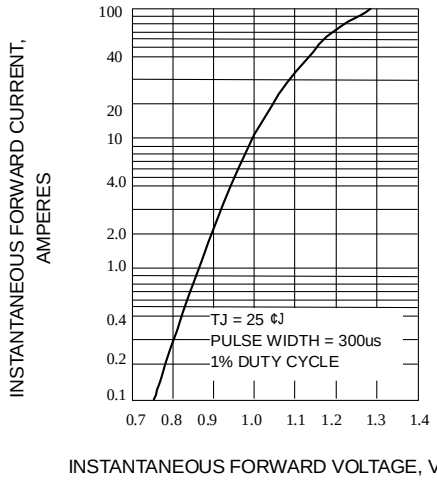

Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT

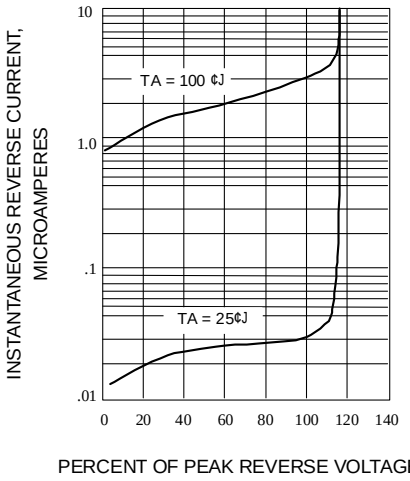

Fig. 3-TYPICAL REVERSE CHARACTERISTICS

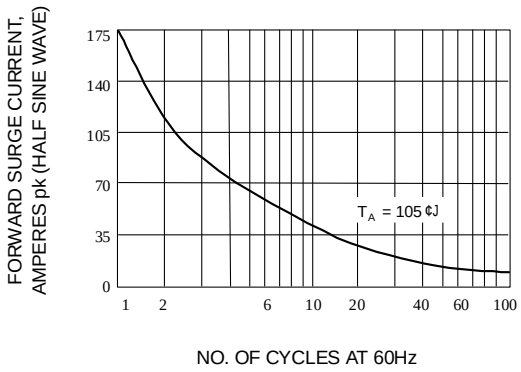

Fig. 4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

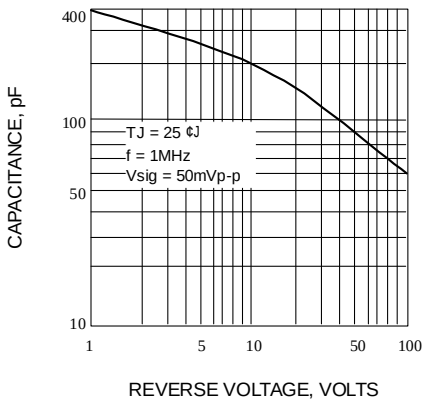

Fig. 5-TYPICAL JUNCTION CAPACITANCE PER ELEMENT