

GBU8A THRU GBU8K

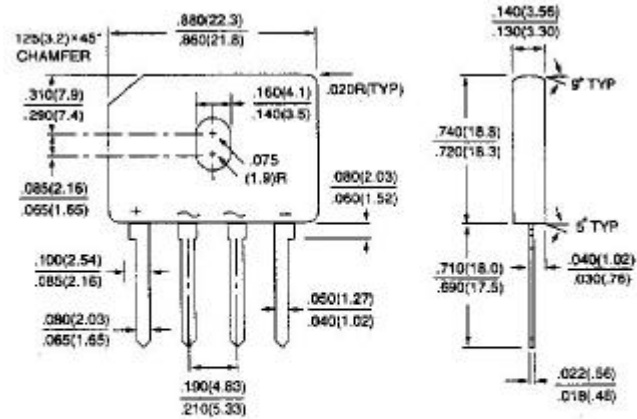
GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE - 50 to 800 Volts CURRENT - 8.0 Amperes

GBU

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: 200 Amperes peak
- High temperature soldering guaranteed:
260 /10 seconds/.375" (9.5mm) lead length at 5 lbs. (2.3kg) tension



Dimensions in inches and (millimeters)

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

For Capacitive load derate current by 20%.

	GBU8A	GBU8B	GBU8D	GBU8G	GBU8J	GBU8K	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 $T_C=100$ Rectified Output Current at $T_A=45$	8.0						$A_{(AV)}$
	6.0						$A_{(AV)}$
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						A_{PK}
Maximum Instantaneous Forward Voltage Drop per element at 8.0A	1.0						V_{PK}
Maximum Reverse Leakage at rated $T_A=25$ Dc Blocking Voltage per element $T_C=100$	5.0						A
	500						A
Typical Thermal Resistance per leg (Note 2) R JA	18.0						/W
Typical Thermal Resistance per leg (Note 3) R JL	3.0						

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 0.5×0.5" (12×12mm)copper pads.
3. Units Mounted on a 3.0×3.0" ×0.11" thick (7.5×7.5×0.3cm) AL plate heatsink.

RATING AND CHARACTERISTIC CURVES

GBU8A THRU GBU8K

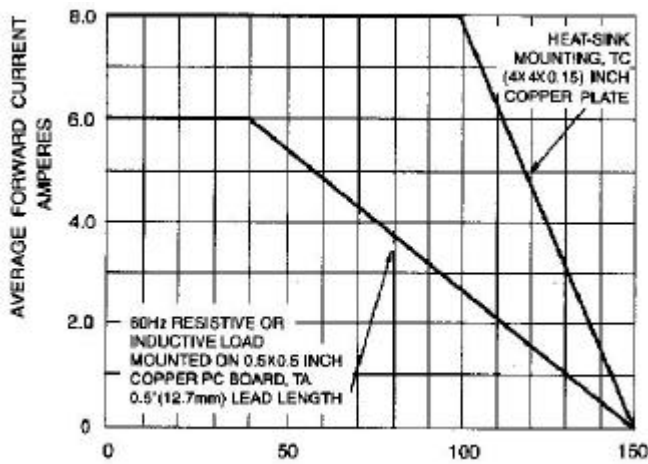


Fig. 1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

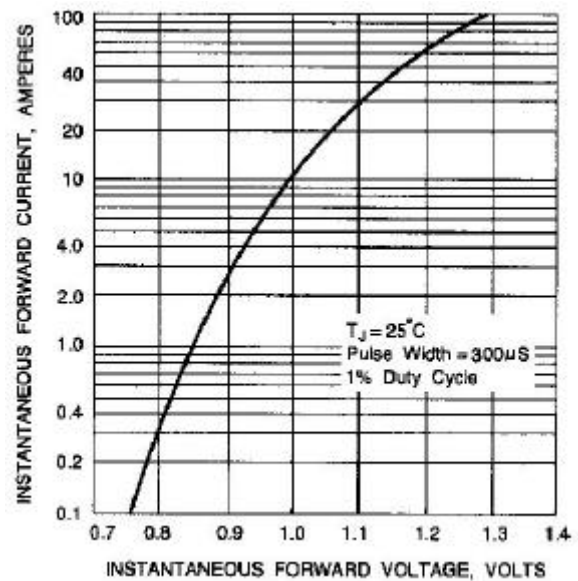


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT

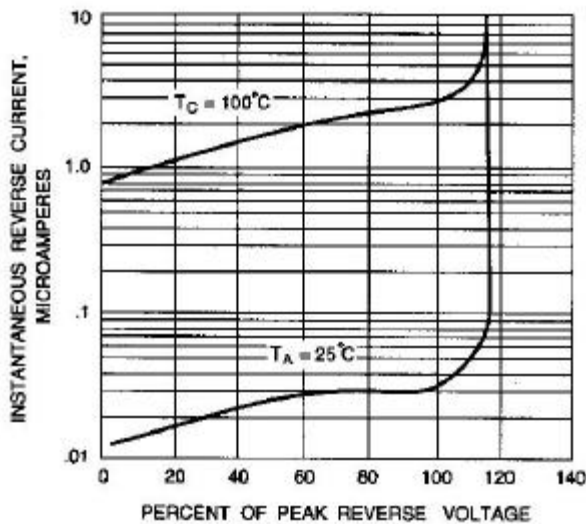


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

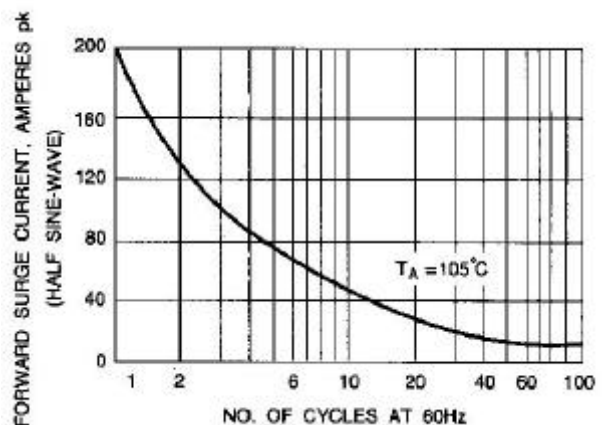


Fig. 4- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

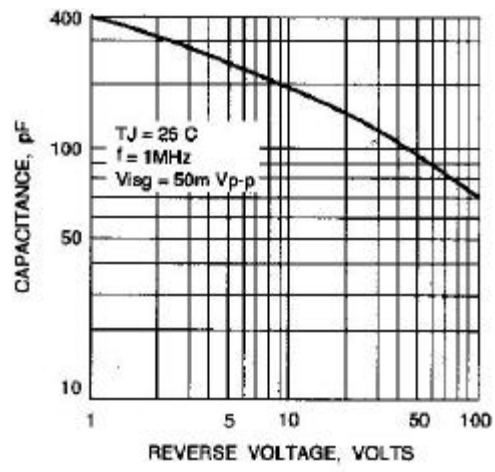


Fig. 5-TYPICAL JUNCTION CAPACITANCE PER ELEMENT