

# GBU6A THRU GBU6K

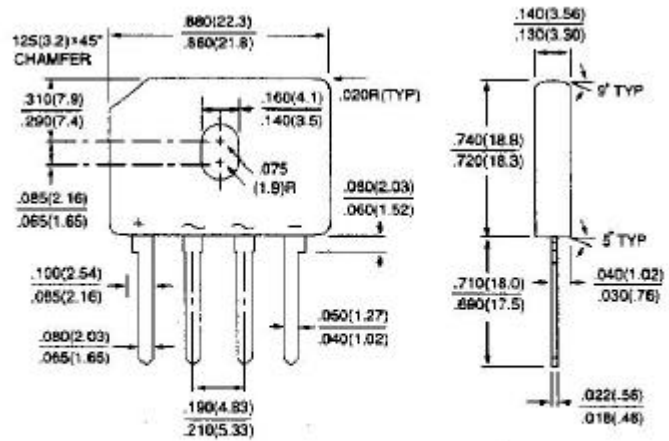
## GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE - 50 to 800 Volts CURRENT - 6.0 Amperes

### GBU

#### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Surge overload rating: 175 Amperes peak
- High temperature soldering guaranteed: 260 /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

#### 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%.

	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 $T_C=100$ 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 $T_A=25$ Dc Blocking Voltage per element $T_C=100$	5.0						A
	500						A
Typical Thermal Resistance per leg (Note 2) R JA	8.6						/W
Typical Thermal Resistance per leg (Note 3) R JL	3.1						

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 0.5x0.5" (12x12mm) copper pads.
3. Units Mounted on a 2.6x1.4" x 0.06" thick (6.5x3.5x0.15cm) AL plate.

RATING AND CHARACTERISTIC CURVES

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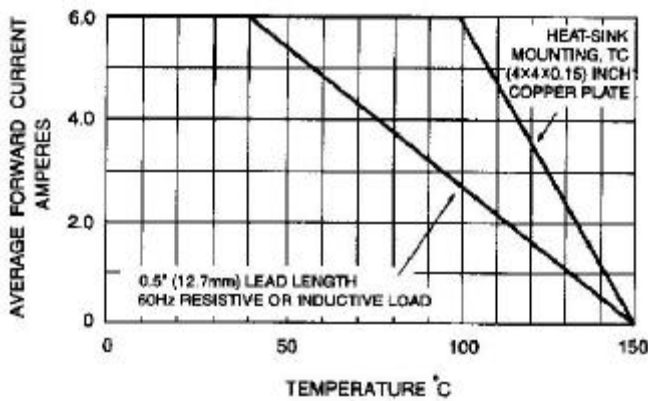


Fig. 1- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

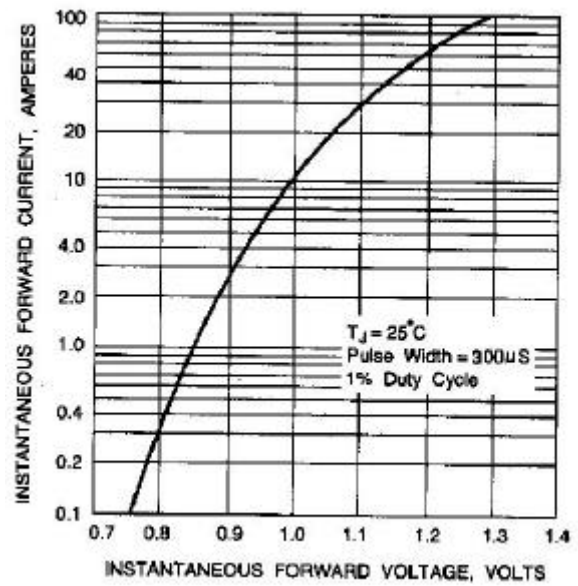


Fig. 2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT

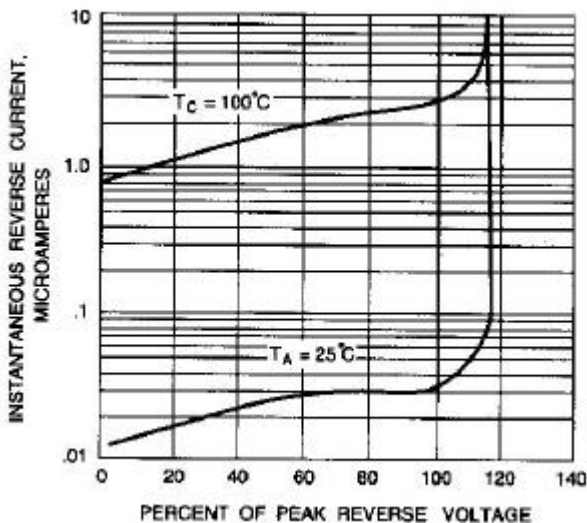


Fig. 3- TYPICAL REVERSE CHARACTERISTICS

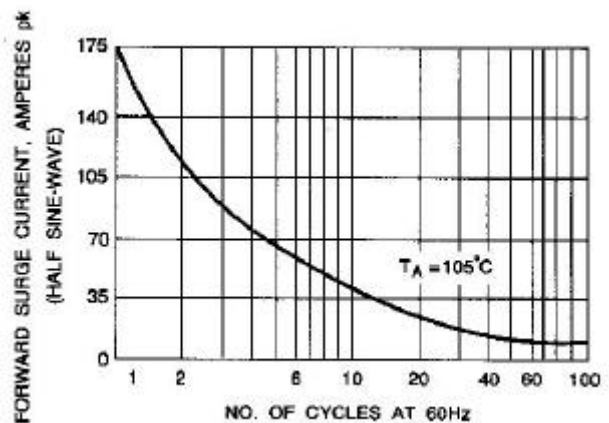


Fig. 4- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

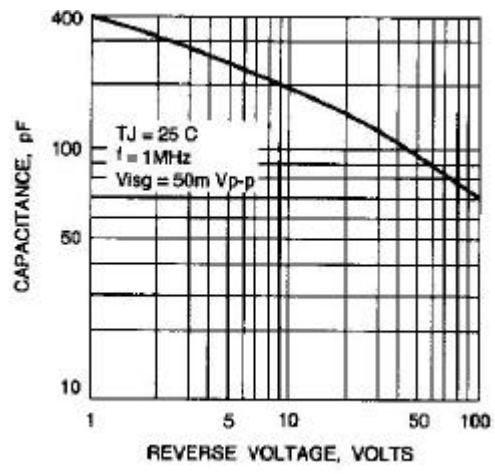


Fig. 5-TYPICAL JUNCTION CAPACITANCE PER ELEMENT