

DATA SHEET

GBU6A thru GBU6K

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE 50 to 800 Volts **POWER** 6.0 Amperes



Recongized File #E111753

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: 175 Amperes peak
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICAL DATA

Case: Reliable low cost construction utilizing molded plastic technique

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

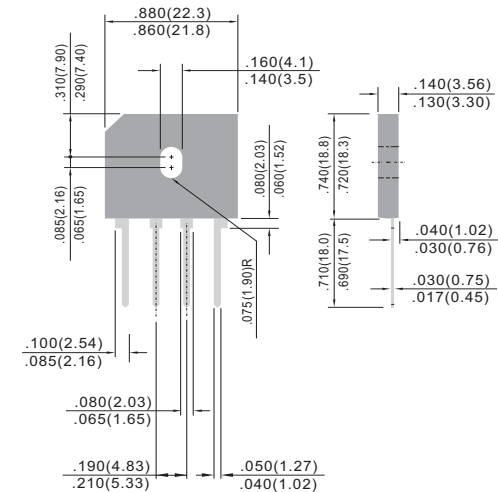
Mounting position: Any

Mounting torque: 5 in. lb. Max.

Weight: 0.15 ounce, 4.0 grams

GBU

Unit: inch (mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

For Capacitive load derate current by 20%.

PARAMETER	SYMBOL	GBU6A	GBU6B	GBU6D	GBU6G	GBU6J	GBU6K	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	V
Maximum Average Forward $T_C=100^\circ C$ Rectified Output Current at $T_A=40^\circ C$	I_A	6.0						A
Ft Rating for fusing ($t \leq 8.3ms$)	I^2t	127						A ² sec
Peak Forward Surge Current single sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	175						Apk
Maximum Instantaneous Forward Voltage Drop per element at 3.0A	V_F	1.0						Vpk
Maximum Reverse Leakage Current at Rated @ $T_A=25^\circ C$ DC Blocking Voltage @ $T_A=100^\circ C$	I_R	5.0 500						μA
Typical Thermal Resistance per leg (Note 2) (Note 3)	$R_{\theta JA}$ $R_{\theta JC}$	8.6 3.1						$^\circ C/W$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150						$^\circ C$

NOTES:

- Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw.
- 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.
- Units Mounted on a 2.6 x 1.4" x 0.06" thick (6.5 x 3.5 x 0.15cm) AL plate.

RATING AND CHARACTERISTIC CURVES

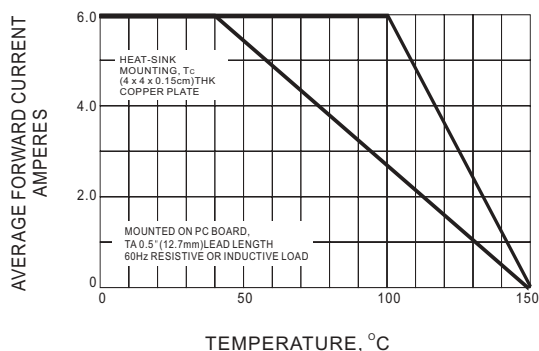


Fig.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

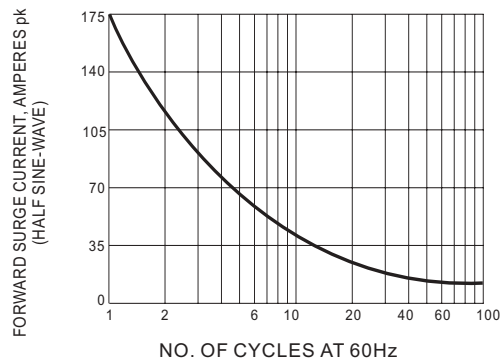


Fig.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

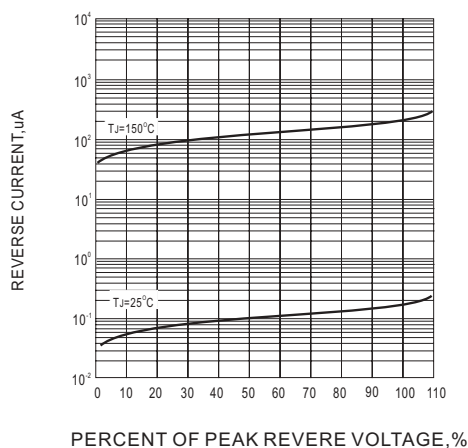


Fig.3 - TYPICAL REVERSE CHARACTERISTICS

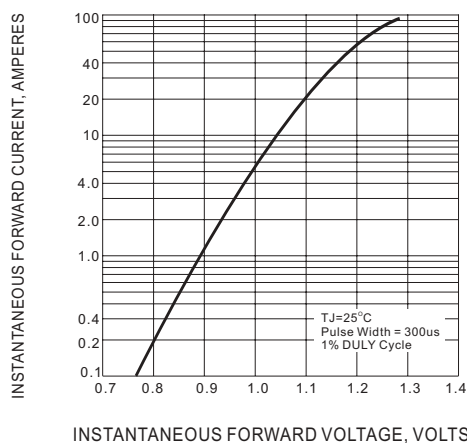


Fig.4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT