

DATA SHEET

GBU4A~GBU4K

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE 50 to 800 Volts **CURRENT** 4.0 Ampere



Recognized File #E11753

FEATURES

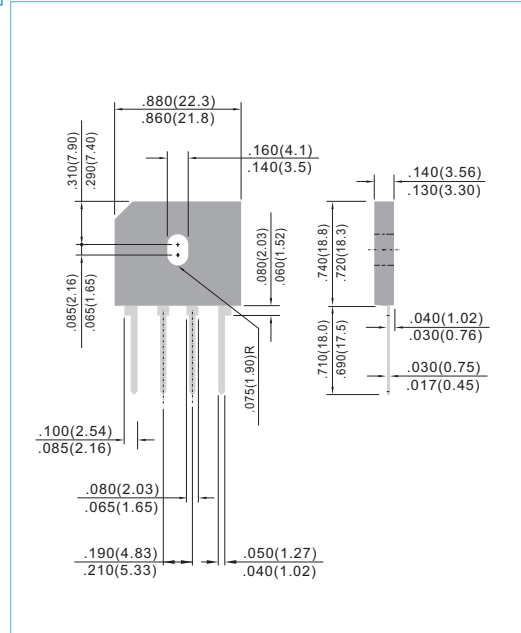
- Plastic material has Underwriters Laboratory Flammability Classification 94V-O
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Surge overload rating: 150 Amperes peak
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICAL DATA

Case: Reliable low cost construction utilizing molded plastic technique
Terminals: Leads solderable per MIL-STD-202, 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	GBU4A	GBU4B	GBU4D	GBU4G	GBU4J	GBU4K	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 Tc=100 °C Rectified Output Current at TA=40 °C	I_{AV}	4.0 3.0						A
It Rating for fusing (t ≤ 8.3ms)	I_t	93						A ² sec
Peak Forward Surge Current single sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150						Apk
Maximum Instantaneous Forward Voltage Drop per element at 2.0A	V_F	1.0						Vpk
Maximum Reverse Leakage Current at Rated @ TA=25°C Dc Blocking Voltage @ TA=100°C	I_R	5.0 500						uA
Typical Thermal Resistance per leg (Note 2) (Note 3)	$R_{\theta JA}$ $R_{\theta JC}$	19 4						°C/W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-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 2.0 x 1.6" x 0.3" thick (5 x 4 x 0.8cm) AL plate.

RATING AND CHARACTERISTIC CURVES

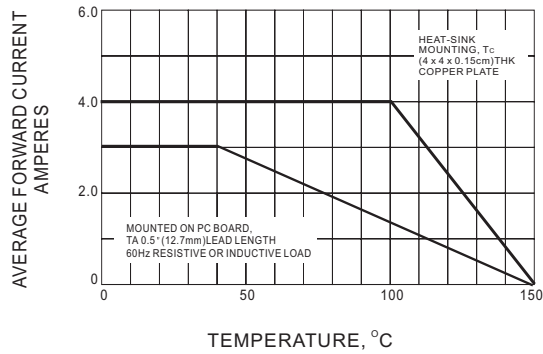


Fig.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

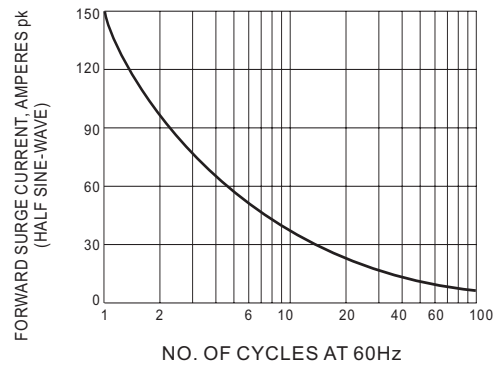


Fig.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

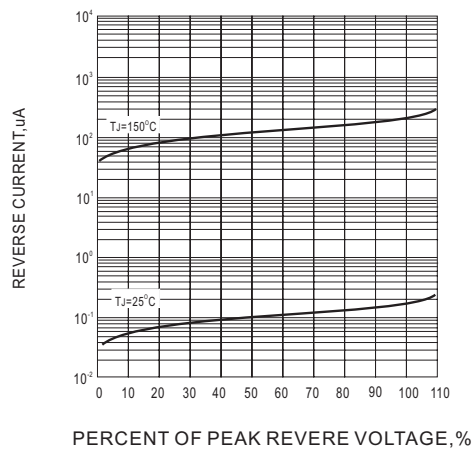


Fig.3 - TYPICAL REVERSE CHARACTERISTICS

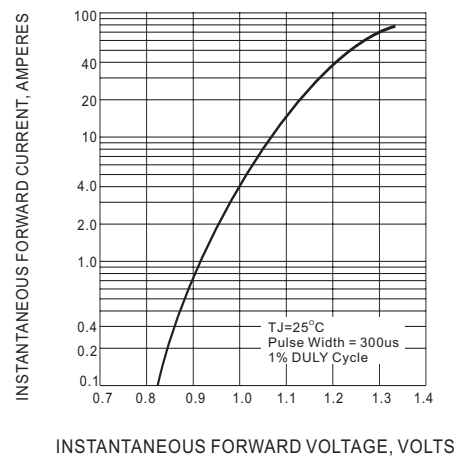


Fig.4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT