



GLASS PASSIVATED CHIP SINGLE-PHASE BRIDGE RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current 4.0 Amperes

Features

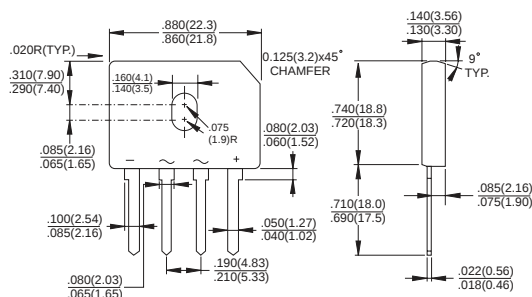
- ★ UL Recognized File # E-96005
- ★ Ideal for printed circuit board
- ★ Reliable low cost construction
- ★ Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- ★ Surge overload rating to 150 amperes peak
- ★ High temperature soldering guaranteed: 260°C / 10 seconds / .375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension



GBU

Mechanical Data

- ★ Case: Molded plastic body
- ★ Terminals: Leads solderable per MIL-STD-750, Method 2026
- ★ Weight: 0.3 ounce, 8.0 grams
- ★ Mounting torque: 5 in. lbs. Max.



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	GBU4A	GBU4B	GBU4D	GBU4G	GBU4J	GBU4K	GBU4M	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified output current (See Fig.2)	$I_{F(AV)}$	4.0							Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							Amps
Maximum instantaneous forward voltage drop per leg at 4.0A	V_F	1.1							Volt
Maximum DC reverse current at rated DC blocking voltage per leg $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	I_R	5.0 500.0							μA
Typical thermal resistance per leg (Note 1) (Note 2)	$R_{\theta JA}$ $R_{\theta JC}$	20.0 4.0							$^\circ\text{C/W}$
Typical Junction Capacitance (Note 3)	C_j	100 45							pF
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$

- Notes: 1. Mounted on P.C.B. with 0.5 x 0.5" (12 x 12mm) Copper Pads and 0.375" 9.5mm) Lead Length.
2. Mounted on Al. Plate of 2" x 3" x 0.25"
3. Measured at 1.0MHZ and Applied Reverse Voltage of 4.0 Volts.



RATINGS AND CHARACTERISTIC CURVES

(T_A = 25°C unless otherwise noted)

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

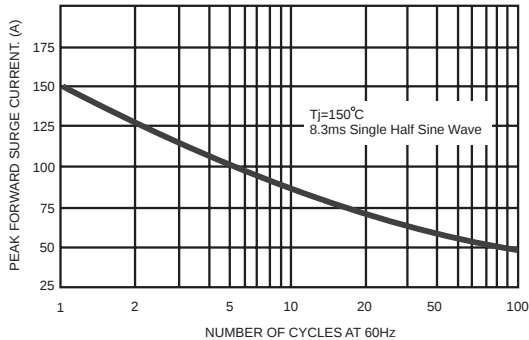


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

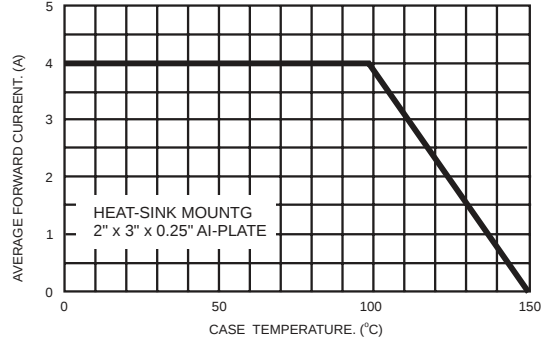


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

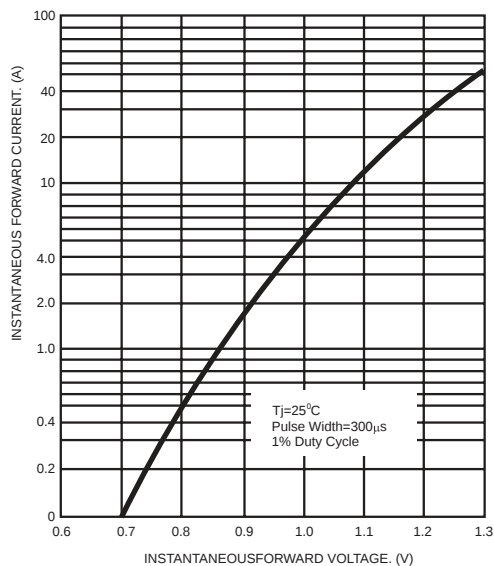


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

