

GBU8A THRU GBU8M

SINGLE PHASE GLASS PASSIVATED BRIDGE

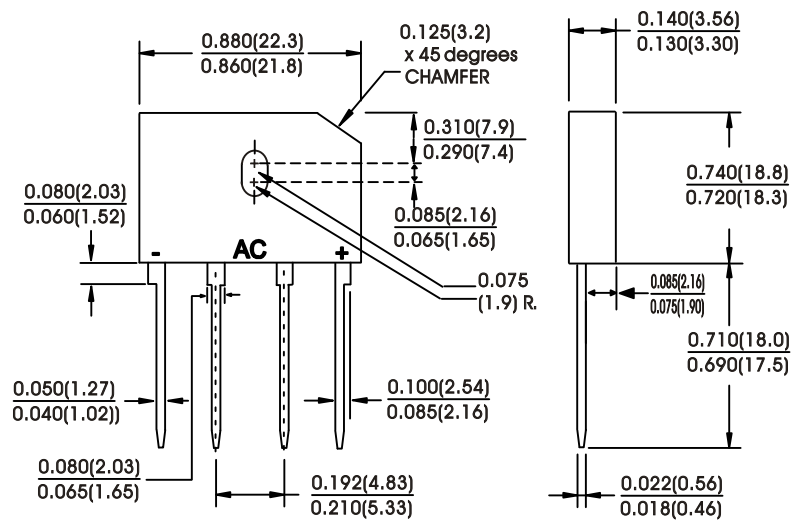
GBU

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength of 1500 V_{RMS}
- Ideal for printed circuit boards
- Glass passivated chip junction
- High surge overload rating
- High temperature soldering guaranteed:
260 °C/10 seconds 0.375" (9.5mm) lead Length

MECHANICAL DATA

- Case:** Molded plastic body over passivated junctions
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Mounting Position: Any (NOTE 2)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temp. unless otherwise specified.
 Single phase, half sine wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20 %.

Characteristic	Symbol	GBU 8A	GBU 8B	GBU 8D	GBU 8G	GBU 8J	GBU 8K	GBU 8M	Units	
Maximum recurrent 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 voltage	V _{DC}	50	100	200	400	600	800	1000	Volts	
Maximum average forward rectified current at T _c =100 °C (NOTE 1)	I _o	8.0							Amps	
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	200.0							Amps	
Rating for fusing (t < 8.3ms)	I ² _T	166.0							A ² Sec	
Maximum instantaneous forward voltage drop per leg at 8.0A	V _F	1.1							Volts	
Maximum DC reverse current at rated DC blocking voltage (Per leg) T _a =25 °C T _a =125 °C	I _R	5.0 500							μ A	
Typical junction (Per leg) (NOTE 2)	C _J	211.0					94.0		PF	
Typical thermal resistance (Per leg) (NOTE 4, 1)	R _{th JA} R _{th JL}	21.0 2.2								° C/W
Operating Junction and storage temperature range	T _J , T _{stg}	-55 to +150							°C	

- NOTES:
 (1) Unit case mounted on 3.2 x 3.2 x 0.12" thick (8.2 x 8.2 x 0.3cm) Al. plate heatsink
 (2) Measured at 1.0MHz and applied reverse of 4.0Volts
 (3) Recommended mounted position is bolt to down on heatsink with silicone thermal compound for maximum heat transfer with #6 screws
 (4) Units mounted in free air, no heat on P.C.B. 0.5 x 0.5" (12x12mm) copper pads, 0.375" (9.5mm) lead length

RATINGS AND CHARACTERISTIC CURVES GBU8A THRU GBU8M

