

GBU10A THRU GBU10M

Glass Passivated Single-Phase Bridge Rectifier

GBU

FEATURES

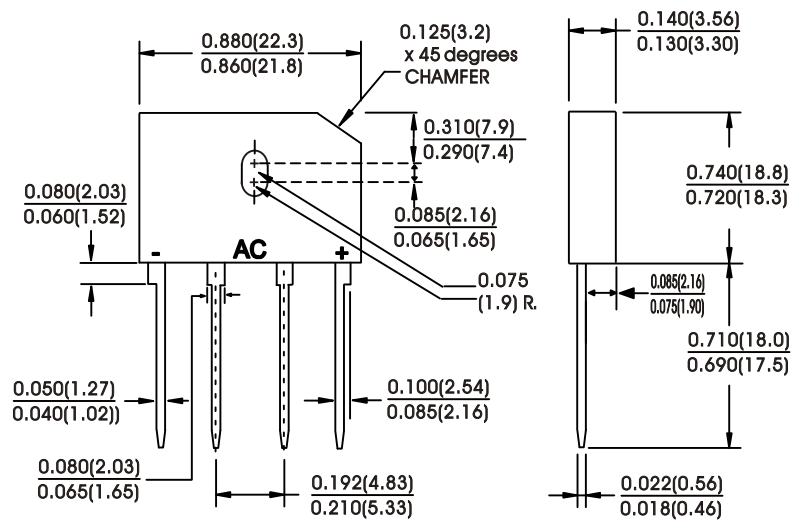
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength of 1500 VRMS
- Ideal for printed circuit boards
- Glass passivated chip junction
- High surge overload rating
- High temperature soldering guaranteed:
260°C/10 seconds 0.375" (9.5mm) lead Length

MECHANICAL DATA

Case: Molded plastic body over passivated junctions

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Mounting Position: Any



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 10A	GBU 10B	GBU 10D	GBU 10G	GBU 10J	GBU 10K	GBU 10M	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	VDC	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at $T_c=100^\circ\text{C}$ (NOTE 1)	I_o	10.0							Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	220.0							Amps
Maximum instantaneous forward voltage drop per leg at 10A (Per leg)	V_F	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage (Per leg)	I_R	5.0 500							μA
Typical junction (Per leg) (NOTE 2)	C_J	70.0							PF
Typical thermal resistance (Per leg) (NOTE 1)	$R_{th\text{ JC}}$	2.2							$^\circ\text{C/W}$
Operating Junction and storage temperature range	T_J, T_{stg}	-55 to +150							$^\circ\text{C}$

NOTES:

(1) Device mounted on 100mm x 100mm x 1.6mm Cu 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 GBU10A THRU GBU10M

