



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206



MASTER INSTRUMENT CORPORATION

**Glass Passivated Single-Phase Bridge Rectifier
GBU4A THRU GBU4M**

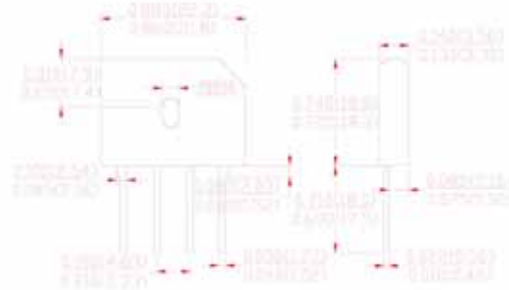
VOLTAGE RANGE 50 to 1000 Volts
Forward Current 4.0 Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Ideal for printed circuit boards
- Glass passivated chip junction
- High surge current capability
- High temperature soldering guaranteed:
260 °C/10 second, 0.375" (9.5mm) lead length at 5 lbs. (2.3kg) tension.

MECHANICAL DATA

- Case: Molded plastic body over passivated junctions
- Terminal: Plate leads solderable per MIL-STD-750 method 2026
- Mounting Position: Any.
- Weight: 0.15 ounce, 4.0 gram



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load derate current by 20%.

	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_{OC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, at	$T_C=100^\circ\text{C}$ (Note 1)	4.0							Amps
	$T_C=40^\circ\text{C}$ (Note 2)	3.0							
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							Amps
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	93							A^2s
Maximum Instantaneous Forward Voltage Drop per Leg at 4.0A	V_f	1.0							Volts
Maximum DC Reverse Current at rated DC blocking voltage per element	$T_A=25^\circ\text{C}$	5.0							μAmps
	$T_A=125^\circ\text{C}$	500							μAmps
Typical Junction Capacitance (Note 1)	C_j	100				45			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	22							$^\circ\text{C}/\text{W}$
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	4.2							$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_b, T_{STG}	-55 to +150							$^\circ\text{C}$

NOTES:

1. Unit case mounted on 1.6×1.6×0.06" thick (4.0×4.0×0.15cm) AL Plate
2. Units mounted on P.C.B With 0.5×0.5"(12×12mm) copper pads and 0.375"(9.5mm) lead length.
3. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206



MASTER INSTRUMENT CORPORATION

Glass Passivated Single-Phase Bridge Rectifier
GBU4A THRU GBU4M

VOLTAGE RANGE 50 to 1000 Volts
Forward Current 4.0 Amperes

Ratings and
Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

