



GBU4XX SERIES

SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIER

产 品 规 格 确 认 书

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GBU4005 THRU GBU410

SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIER

REVERSE VOLTAGE: 50 to 1000 VOLTS

FORWARD CURRENT: 4.0 AMPERE

FEATURES

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Ideal for printed circuit board
- Plastic material has Underwriters Laboratory Flammability
- Classification 94V-0
- High surge current capability
- High case dielectric strength of 1500VRMS
- High temperature soldering guaranteed: 260°C/10s/.375",
(9.5mm)lead lengths at 5 lbs.(2.3kg) tension.

MECHANICAL DATA

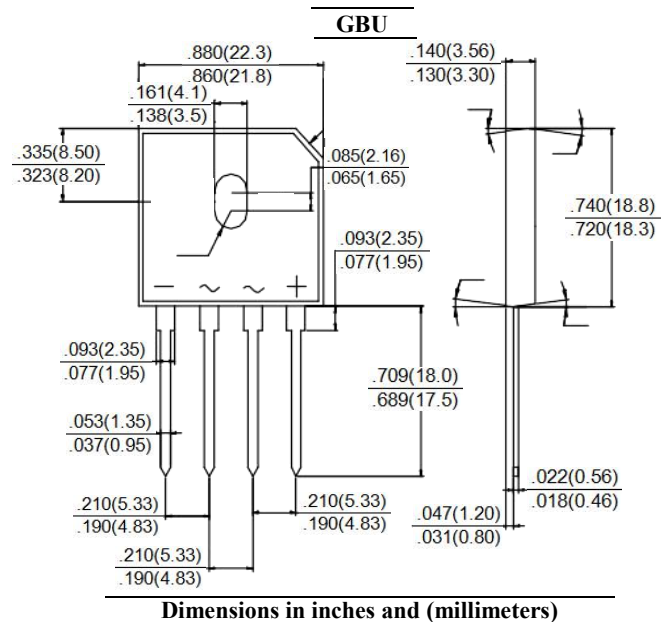
Case: Molded plastic, GBU

Epoxy: UL 94V-O rate flame retardant

Terminals: Pure tin plated, lead free, Leads solderable
per MIL-STD-202, method 208 guaranteed

Mounting position: As marking

Weight: 4.0gram



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	GBU4005	GBU401	GBU402	GBU404	GBU406	GBU408	GBU410	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 Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current @ T _C =100℃	I _(AV)	4.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	150							Amp
Maximum Instantaneous Forward Voltage @2.0V @4.0V	V _F	1.0 1.1							Volts
Maximum Reverse Current at T _A =25℃ at Rated DC Blocking Voltage T _A =125℃	I _R	5.0 500							uAmp
Typical Junction Capacitance (Note 3)	C _J	100				45			pF
Typical Thermal Resistance (Note 2)	R _{θJA}	20							℃/W
Typical Thermal Resistance (Note 1)	R _{θJC}	4.0							℃/W
Operating and Storage Temperature Range	T _J , T _{stg}	-55 to +150							℃

NOTES: 1- Unit case mounted on 1.6 x 1.6 x 0.06" thick (4.0 x 4.0 x 0.15cm) Al. Plate

2- Units mounted on P.C.B. with 0.5 x 0.5" (12 x 12mm) copper pads and 0.375" (9.5mm) lead length .

3- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

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RATINGS AND CHARACTERISTIC CURVES

FIG.1-MAXIMUM FORWARD CURRENT DERATING CURVE

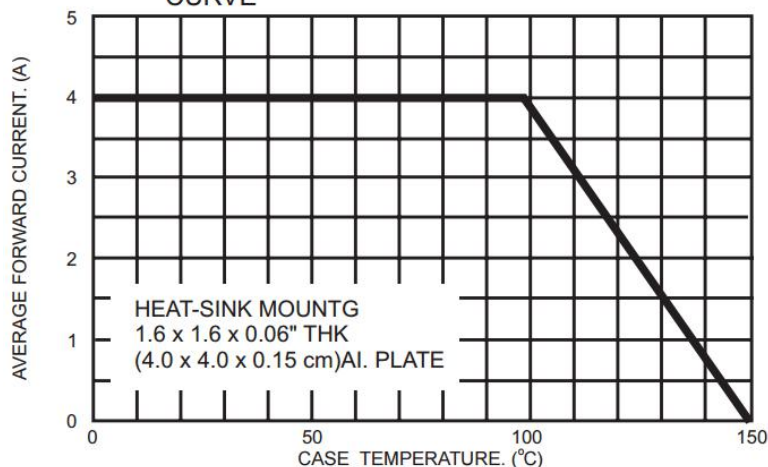


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

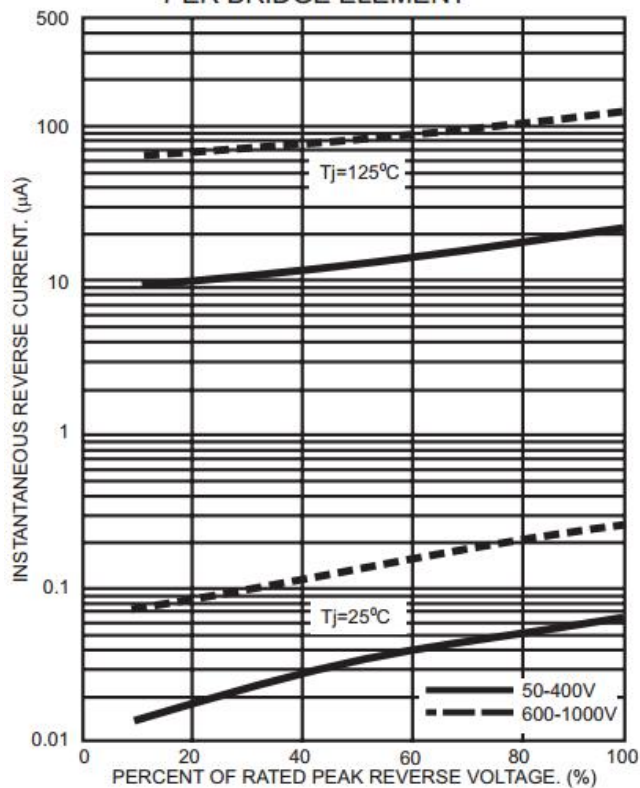


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

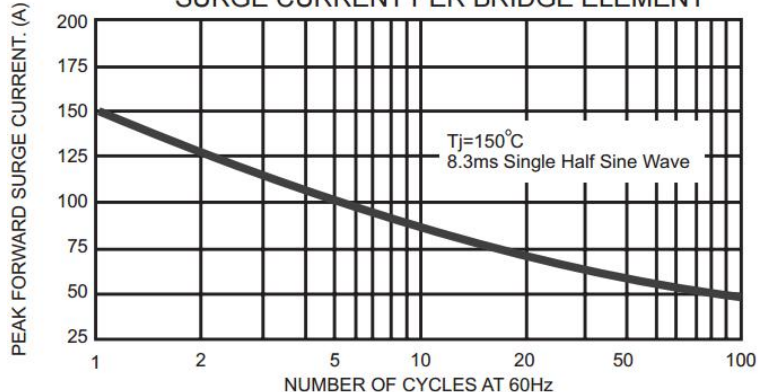


FIG.5- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

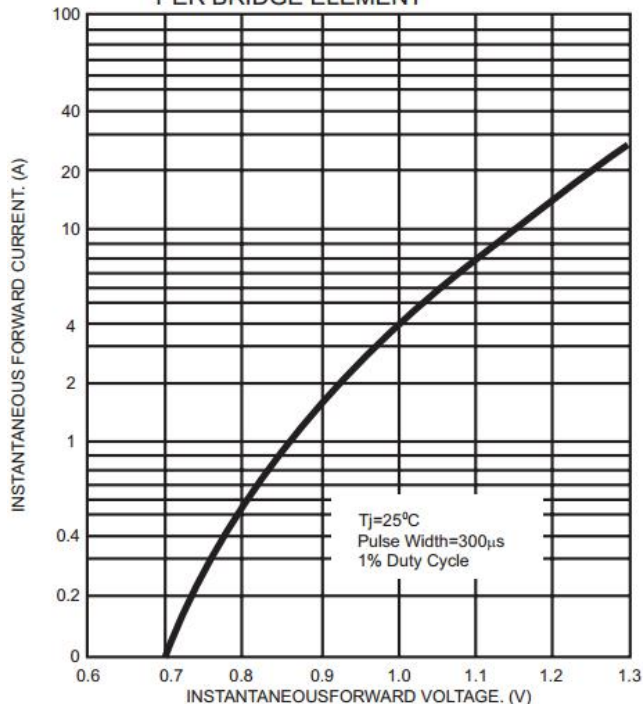


FIG.4- TYPICAL JUNCTION CAPACITANCE

