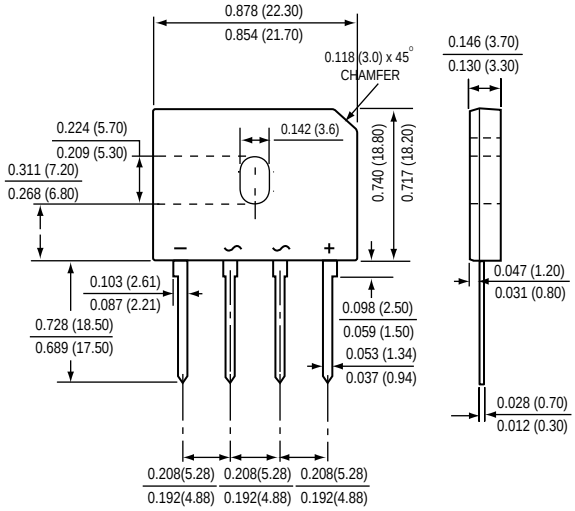
GBU802H THRU GBU810H

GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 200 to 1000 Volts *Forward Current - 8.0 Amperes*

GBU



Polarity shown on front side of case, positive lead by beveled corner

*Dimensions in inches and (millimeters)

FEATURES

* Halogen-free type
* Glass passivated chip junctions
* Compliance to RoHS product
* Plastic Material has Underwriters Laboratory Flammability Classification 94V-0
* High surge current capability
* Ideal for Printed Circuit Boards
* High temperature soldering guaranteed : 260°C/10 seconds

MECHANICAL DATA

Case : Molded Plastic

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

Polarity : As marked on Body

Weight : 4.0 grams (approx)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	*SYMBOLS*	***GBU802H***	***GBU804H***	***GBU806H***	***GBU808H***	***GBU810H***	*UNITS*
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	Volts
Maximum average forward rectified current Tc=100°C (NOTE1,2)	$I_{(AV)}$	8.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200					Amps
Maximum instantaneous forward voltage at 4.0 A	V_F	1.0					Volts
Maximum DC reverse current @TA=25°C at rated DC blocking voltage @TA=125°C	I_R	5 500					uA
Typical Junction Capacitance per element (NOTE 4)	C_J	60					pF
Typical thermal resistance per leg (NOTE 3)	$R_{\theta JA}$ $R_{\theta JC}$	21.0 2.2					°C / W
Operating junctionStorage temperature range	T_J,T_{STG}	-55 to +150					°C

NOTES : (1) Unit case mounted on Al plate heat-sink
(2) Unit mounted on P.C.B. without heat-sink
(3) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw heat-sink size : 8.2 x 8.2 x 0.3cm)
(4) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

RATINGS AND CHARACTERISTIC CURVES GBU802H THRU GBU810H

FIG.1 - FORWARD CURRENT DERATING CURVE

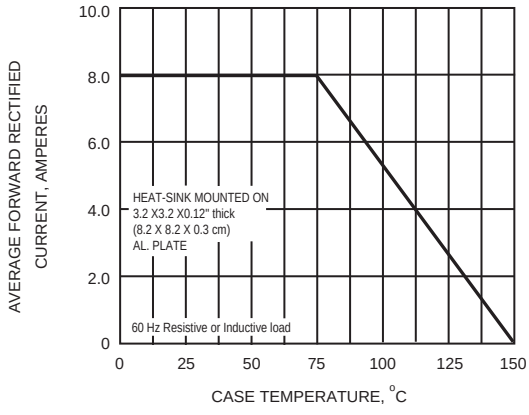


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

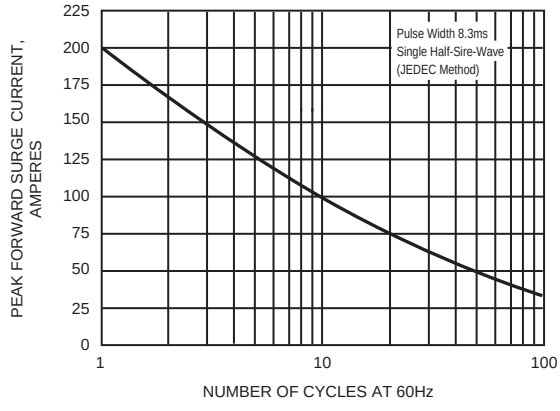


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

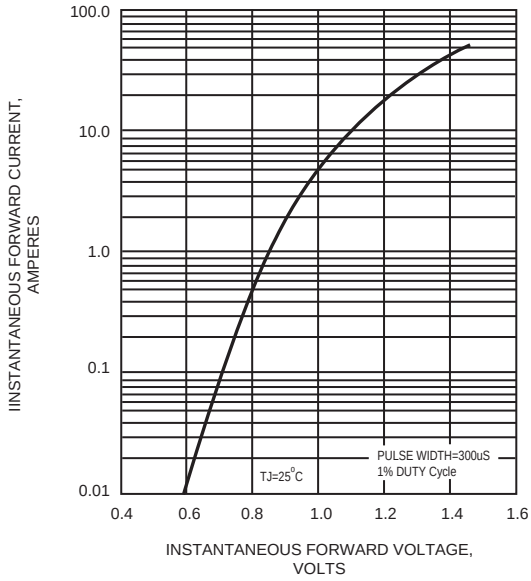


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

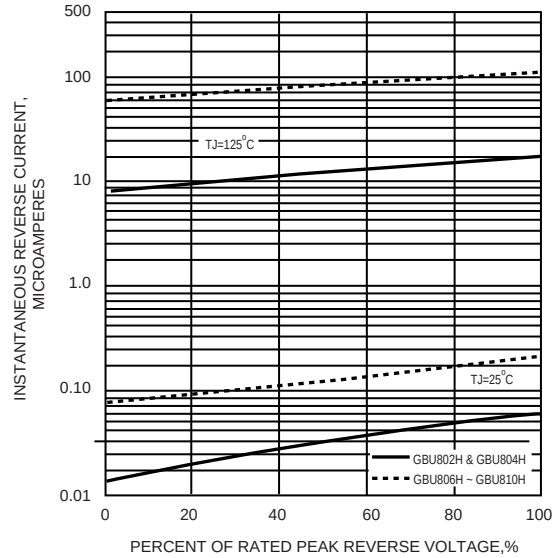


FIG.5 - TYPICAL JUNCTION CAPACITANCE