



# GBU402 THRU GBU410

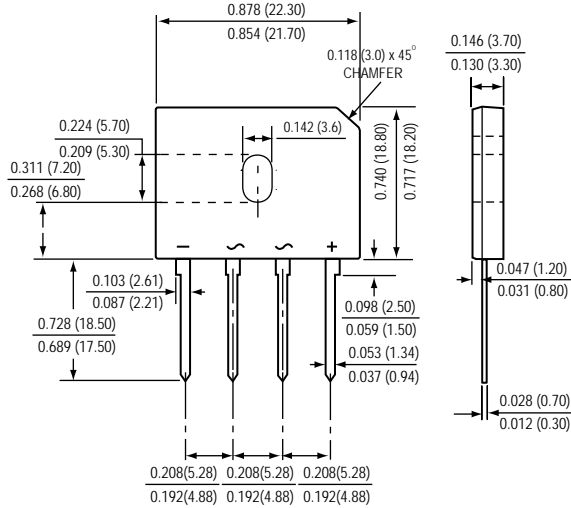
## GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 200 to 1000 Volts

Forward Current - 4.0 Amperes



**GBU**



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

\*Dimensions in inches and (millimeters)

### FEATURES

- \* 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	GBU402	GBU404	GBU406	GBU408	GBU410	UNITS
Maximum repetitive peak reverse voltage	VRRM	200	400	600	800	1000	Volts
Maximum RMS voltage	VRMS	140	280	420	560	700	Volts
Maximum DC blocking voltage	VDC	200	400	600	800	1000	Volts
Maximum average forward rectified current Tc=100°C (NOTE 1,2)	I (AV)	4.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	150					Amps
Maximum instantaneous forward voltage at 2.0 A	VF	1.0					Volts
Maximum DC reverse current @TA=25°C at rated DC blocking voltage @TA=125°C	IR	5 500					uA
Typical Junction Capacitance per element (NOTE 4)	CJ	45					pF
Typical thermal resistance per leg (NOTE 3)	RθJA RθJC	22.0 4.2					°C / W
Operating junctionStorage temperature range	TJ,TSTG	-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 : 6.35 x 3.5 x 0.15cm)  
 (4) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

# RATINGS AND CHARACTERISTIC CURVES GBU402 THRU GBU410

FIG.1 - FORWARD CURRENT DERATING CURVE

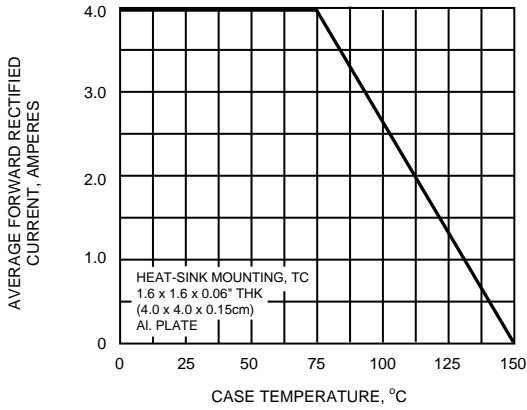


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

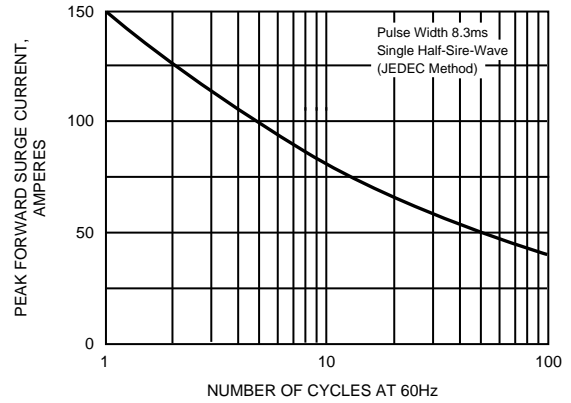


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

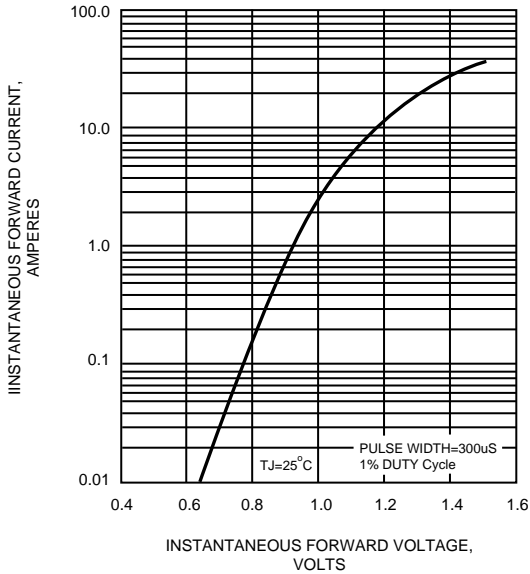


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

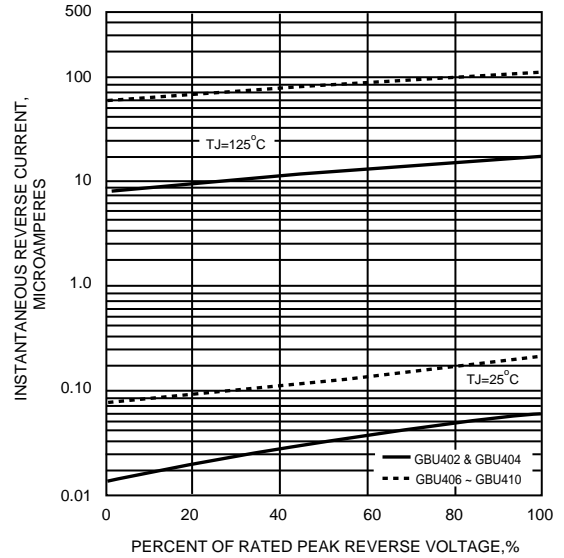


FIG.5 - TYPICAL JUNCTION CAPACITANCE

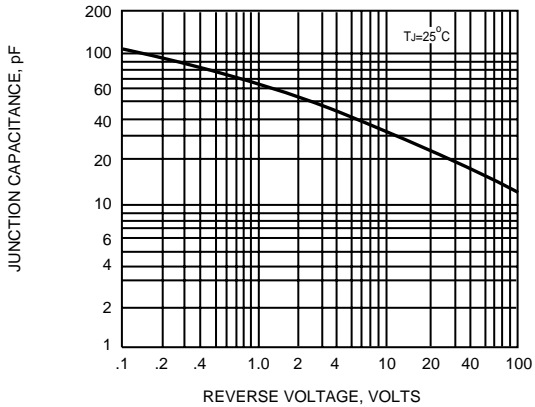


FIG.6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

