



GBU4005 THRU GBU410

Reverse Voltage - 50 to 1000 Volts Forward Current - 4.0 Amperes

GLASS PASSIVATED BRIDGE RECTIFIERS

Features

- ◆ Surge overload rating -150 amperes peak
- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ Plastic material has U/L flammability classification 94V-0

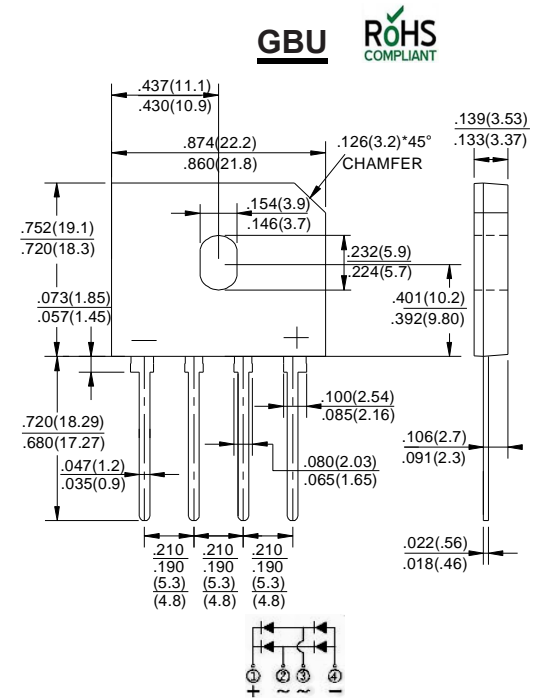
Mechanical Data

Case : JEDEC GBU Molded plastic body

Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any



Maximum Ratings And Electrical Characteristics

Dimensions in inches and (millimeters)

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	MDD GBU4005	MDD GBU401	MDD GBU402	MDD GBU404	MDD GBU406	MDD GBU408	MDD GBU410	UNITS
Marking Code									
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward (with heatsink NOTE 2) Rectified current @ $T_c = 100^\circ\text{C}$ (without heatsink)	$I_{(AV)}$					4.0			A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}					150			A
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t					93			A^2s
Maximum forward voltage at 2.0A DC	V_F					1.1			V
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 125^\circ\text{C}$	I_R					10			μA
						0.5			mA
Typical Junction Capacitance (Note 1)	C_J					45			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$					2.2			$^\circ\text{C/W}$
Operating junction temperature range	T_J					-55 to +150			$^\circ\text{C}$
storage temperature range	T_{STG}					-55 to +150			$^\circ\text{C}$

- NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
 2. Device mounted on 75mm*75mm*1.6mm cu plate heatsink.
 3. The typical data above is for reference only.



Ratings And Characteristic Curves

FIG.1-FORWARD CURRENT DERATING CURVE

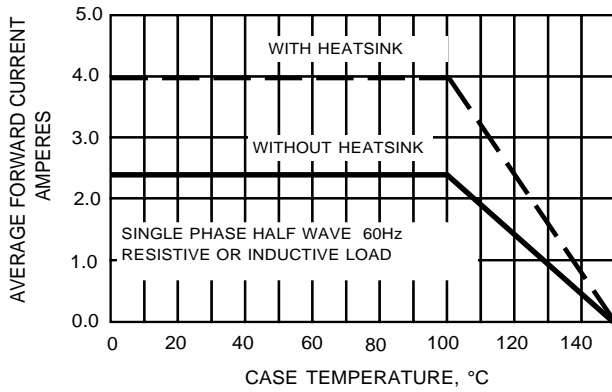


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

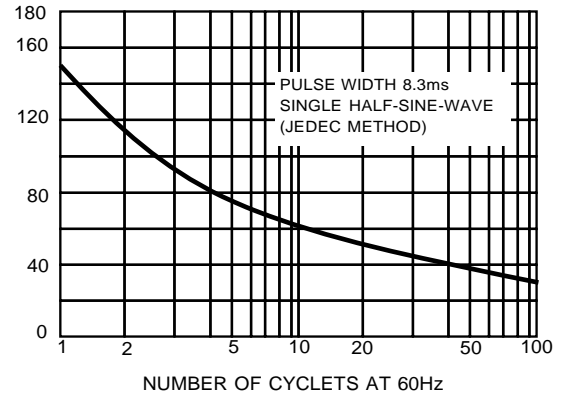


FIG.3-TYPICAL JUNCTION CAPACITANCE

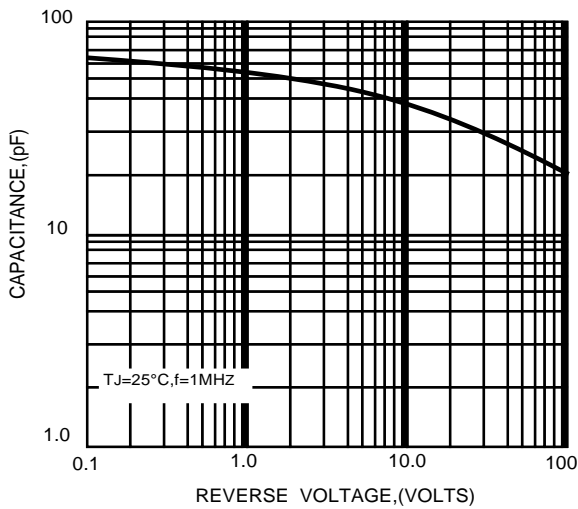


FIG.4-TYPICAL FORWARD CHARACTERISTICS

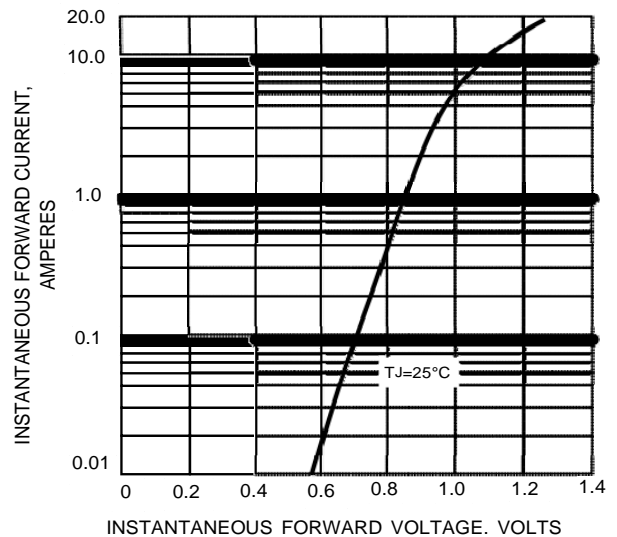
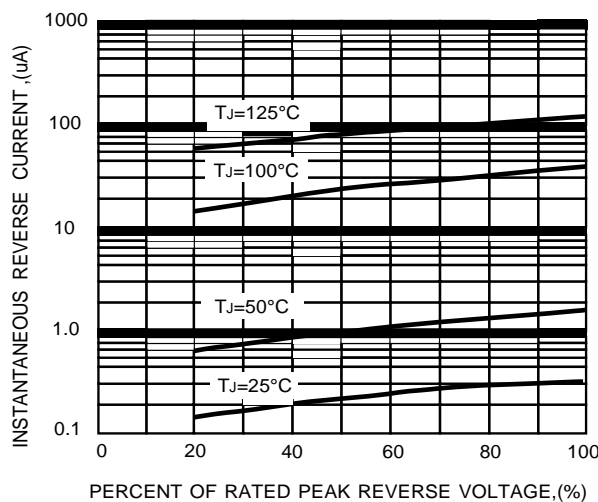


FIG.5-TYPICAL REVERSE CHARACTERISTICS



The curve above is for reference only.

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