



GBU25005 THRU GBU2510

Reverse Voltage - 50 to 1000 Volts Forward Current - 25.0 Amperes

GLASS PASSIVATED BRIDGE RECTIFIERS

Features

- ◆ Surge overload rating -350 amperes peak
- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ Plastic material has U/L flammability classification 94V-0

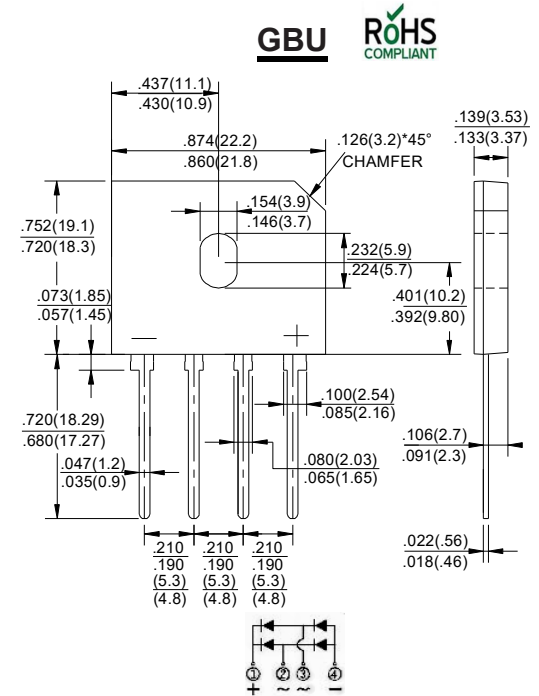
Mechanical Data

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 GBU25005	MDD GBU2501	MDD GBU2502	MDD GBU2504	MDD GBU2506	MDD GBU2508	MDD GBU2510	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}	25.0 4.2							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	300							A
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	508							A^2s
Maximum forward voltage at 12.5A DC	V_F	1.0							V
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	I_R	5 0.5							μA mA
Typical Junction Capacitance (Note 1)	C_J	70							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	2.2							$^\circ\text{C}/\text{W}$
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 100mm*100mm*1.6mm cu plate heatsink.
3. The typical data above is for reference only.



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Ratings And Characteristic Curves

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

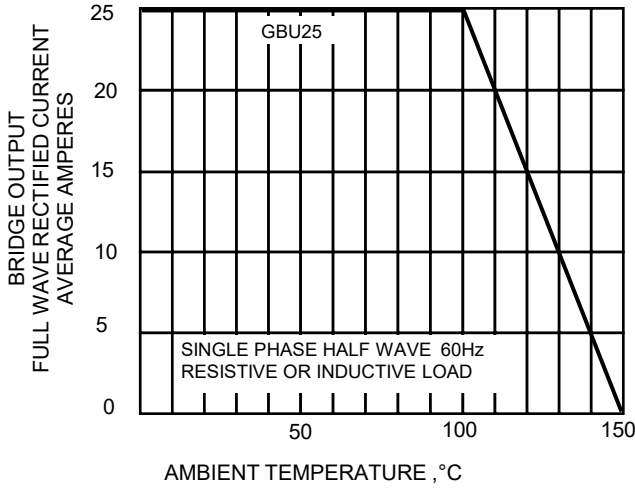


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

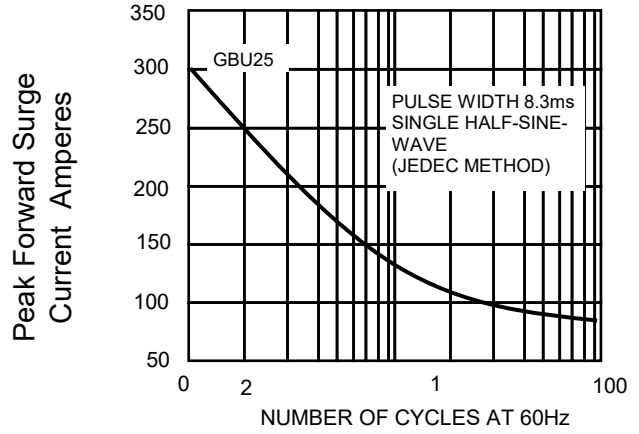


FIG.3-TYPICAL REVERSE CHARACTERISTICS

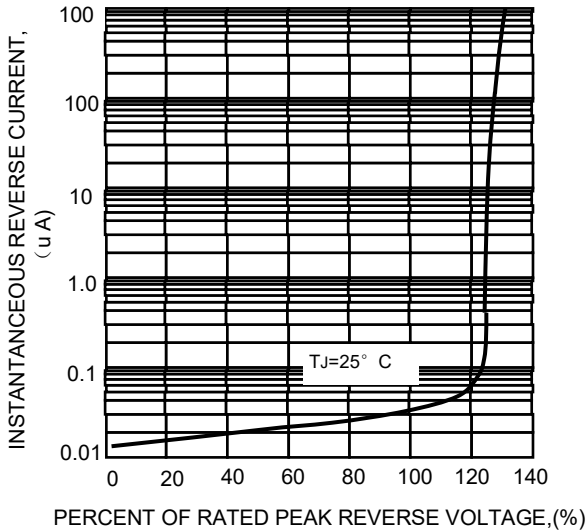
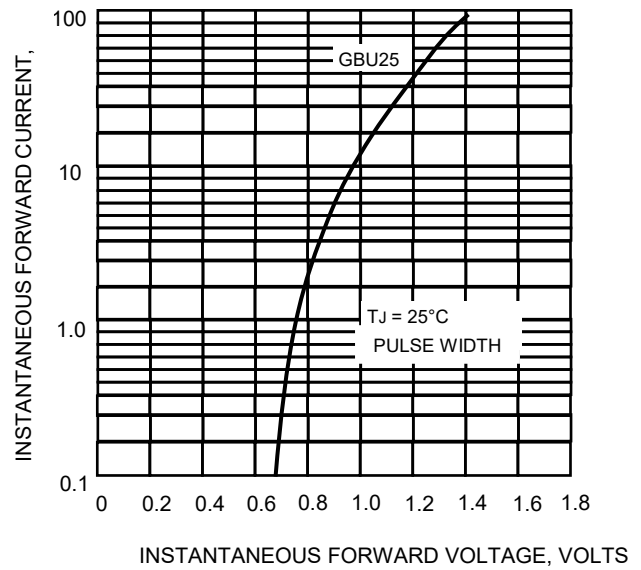


FIG.4-TYPICAL FORWARD CHARACTERISTICS



The curve graph is for reference only