



GBU25005 THRU GBU2510

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

GLASS PASSIVATED BRIDGE RECTIFIERS

Features

- ◆ Surge overload rating -135 amperes peak
- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ Plastic material has U/L flammability classification 94V-0

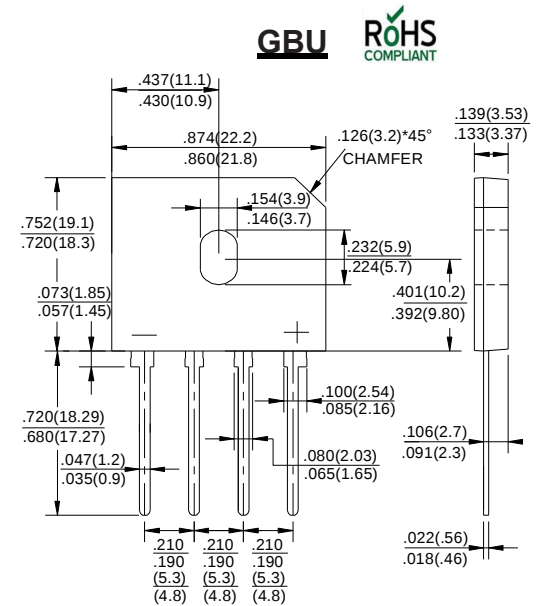
Mechanical Data

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



Dimensions in inches and (millimeters)

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 current derate by 20%.

Parameter	SYMBOLS	GBU 25005	GBU 2501	GBU 2502	GBU 2504	GBU 2506	GBU 2508	GBU 2510	UNITS
Marking Code		MDD GBU 25005	MDD GBU 2501	MDD GBU 2502	MDD GBU 2504	MDD GBU 2506	MDD GBU 2508	MDD GBU 2510	
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}	350.0							A
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	508							A ² s
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	10 500							μA μA
Typical Junction Capacitance (Note 1)	C_J	70							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.



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Ratings And Characteristic Curves

FIG.1-MAXIMUM FORWARD SURGE CURRENT

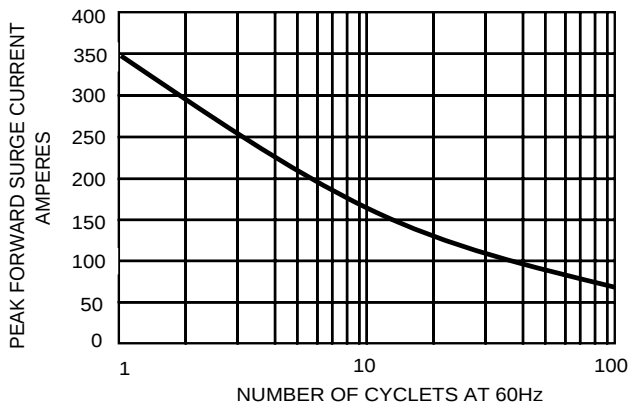


FIG.2- DERATING CURVE
OUTPUT RECTIFIED CURRENT

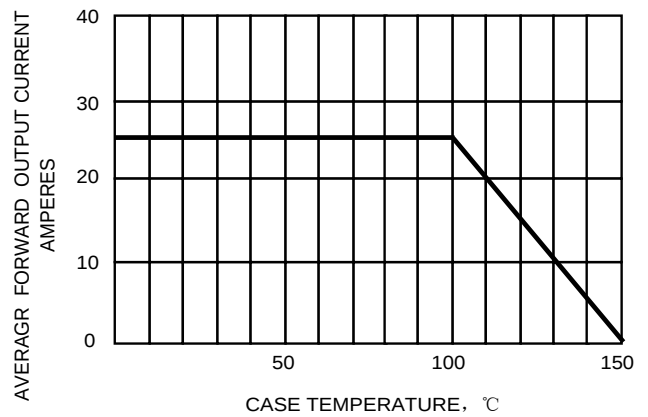


FIG.3-TYPICAL FORWARD CHARACTERISTICS

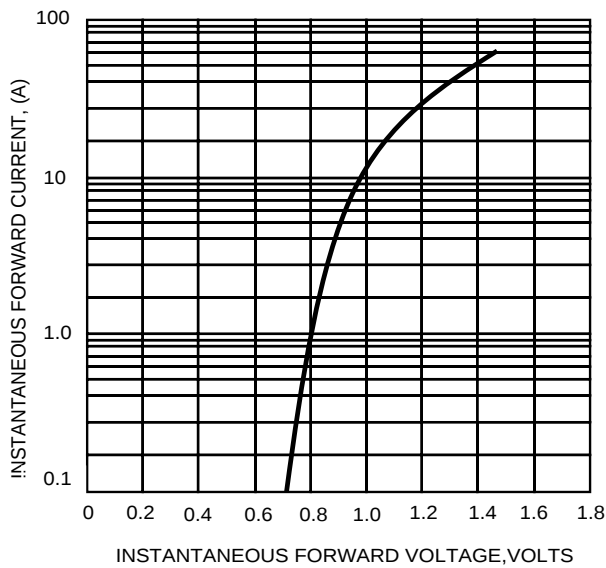
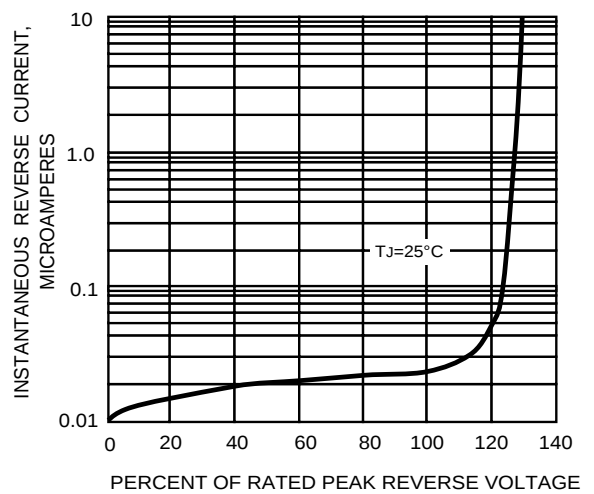


FIG.4-TYPICAL REVERSE CHARACTERISTICS



The curve graph is for reference only