

25.0A Glass Passivated Single-Phase Bridge Rectifiers-50-1000V

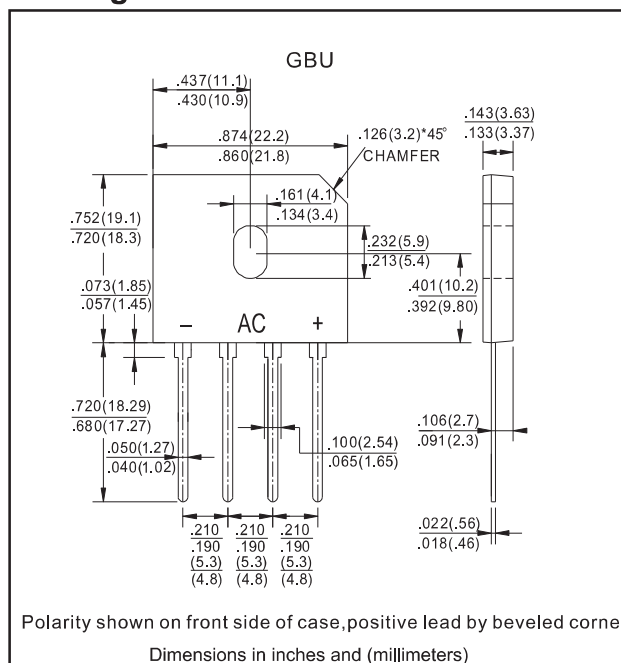
FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- The plastic material has UL flammability classification 94V-0
- Electrically isolated base-1500 Vlots
- Suffix "-H" indicates Halogen free parts, ex. GBU2510-H.

MECHANICAL DATA

- Polarity : As marked on Body
- Mounting position : Any

Package outline



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, derate current by 20%

CHARACTERISTICS	SYMBOL	GBU 25005	GBU 2501	GBU 2502	GBU 2504	GBU 2506	GBU 2508	GBU 2510	UNIT
Maximum Recurrent 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	100	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2) Rectified Current @T _C =100°C (without heatsink)	I _{AV}	25							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	300							A
Maximum forward Voltage at 12.5A DC	V _F	1.0							V
Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =125°C	I _R	5.0 500							uA
I ² t Rating for fusing (t < 8.3ms)	I ² t	374							A ² S
Typical Junction Capacitance per element (Note 1)	C _J	50							pF
Typical Thermal Resistance (Note 2)	R _{θJC}	2.0							°C/W
Operating Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2.Device mounted on 200mm x 200mm x 5mm Al Plate Heatsink.

RATINGS AND CHARACTERISTIC CURVER

FIG.1- DERATING CURVE
OUTPUT RECTIFIED CURRENT

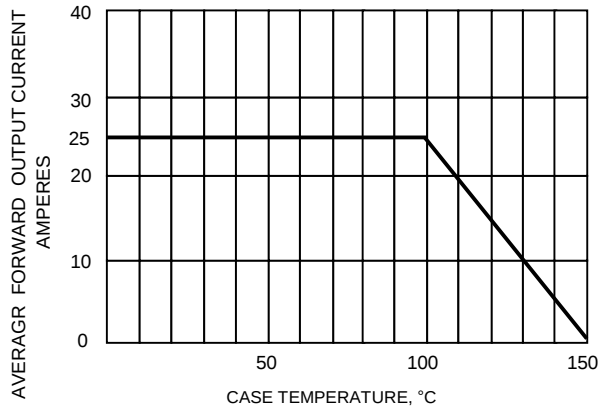


FIG.2-TYPICAL FORWARD
CHARACTERISTICS

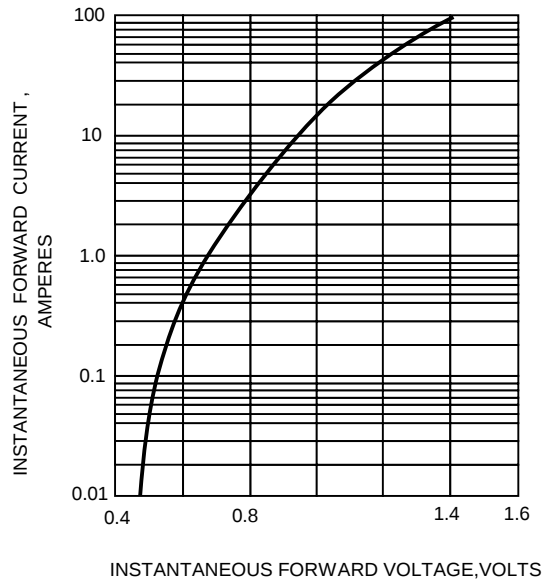


FIG.3-MAXIMUM FORWARD SURGE CURRENT

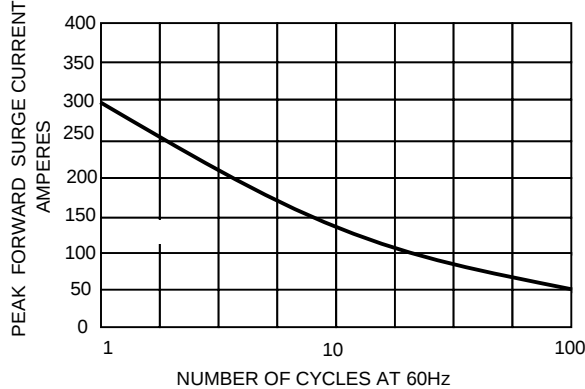


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

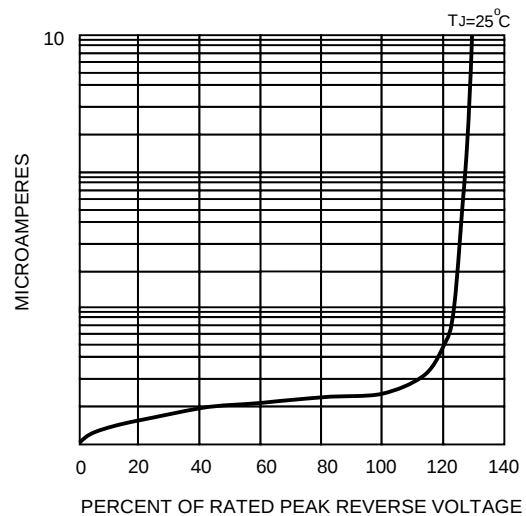
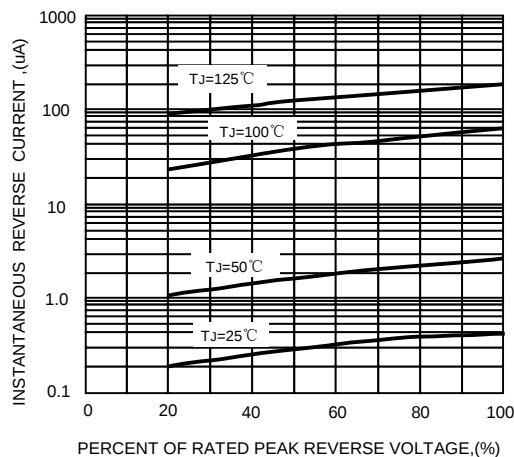
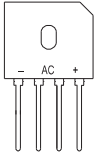
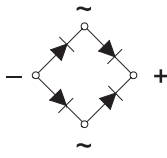


FIG.5-TYPICAL REVERSE CHARACTERISTICS



Pinning information

Simplified outline	Symbol
	

Marking

Type number	Marking code
GBU25005	GBU25005
GBU2501	GBU2501
GBU2502	GBU2502
GBU2504	GBU2504
GBU2506	GBU2506
GBU2508	GBU2508
GBU2510	GBU2510