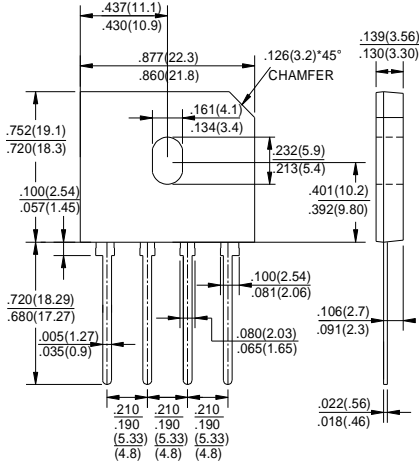


GBU25005 THRU GBU2510

GLASS PASSIVATED BRIDGE RECTIFIERS

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

GBU



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: Molded plastic body
Lead: Solder plated
Polarity: As marked

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%.

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	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 Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	350								A
Maximum Forward Voltage at 12.5A DC	V_F	1.0								V
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_J=125^\circ\text{C}$	I_R	10.0						500		μA
I^2t Rating for Fusing ($t<8.3\text{ms}$)	I^2t	200								A^2s
Typical Junction Capacitance Per Element (Note1)	C_J	70								pF
Typical Thermal Resistance	R_{JC}	2.2								$^\circ\text{C}/\text{W}$
Operating 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.

RATINGS AND CHARACTERISTIC CURVES GBU25005 THRU GBU2510

FIG.1-MAXIMUM FORWARD SURGE CURRENT

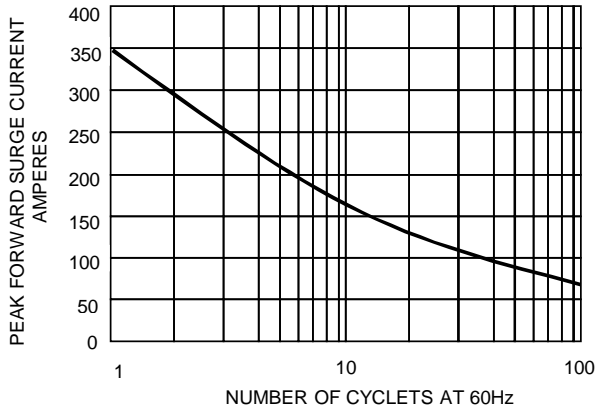


FIG.2- DERATING CURVE
OUTPUT RECTIFIED CURRENT

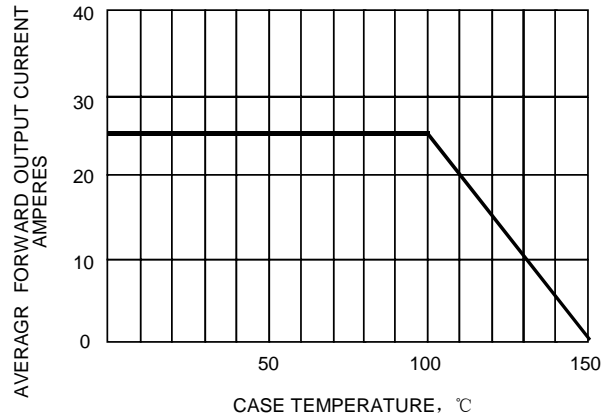


FIG.3-TYPICAL FORWARD
CHARACTERISTICS

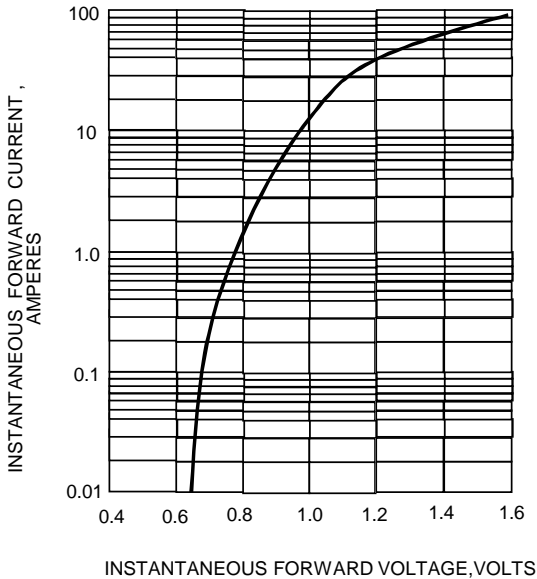


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

