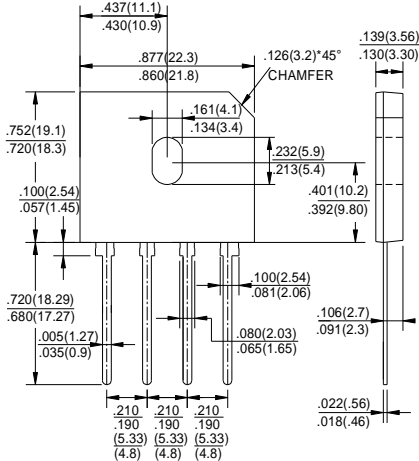


GBU15005 THRU GBU1510

GLASS PASSIVATED BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 15.0 Amperes

GBU



FEATURES

- ◆ Surge overload rating -240 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 15005	GBU 1501	GBU 1502	GBU 1504	GBU 1506	GBU 1508	GBU 1510	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°C (without heatsink)	I _(AV)					15.0				A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}					240				A
Maximum Forward Voltage at 7.5A DC	V _F					1.1				V
Maximum DC Reverse Current @ T _J =25°C at Rated DC Blocking Voltage @ T _J =125°C	I _R					10.0				µA
I ² t Rating for Fusing (t<8.3ms)	I ² t					200				A ² s
Typical Junction Capacitance Per Element (Note1)	C _J					70				pF
Typical Thermal Resistance	R _{θJC}					2.2				°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 100mm*100mm*1.6mm Cu plate heatsink.

RATINGS AND CHARACTERISTIC CURVES GBU15005 THRU GBU1510

FIG.1-MAXIMUM FORWARD SURGE CURRENT

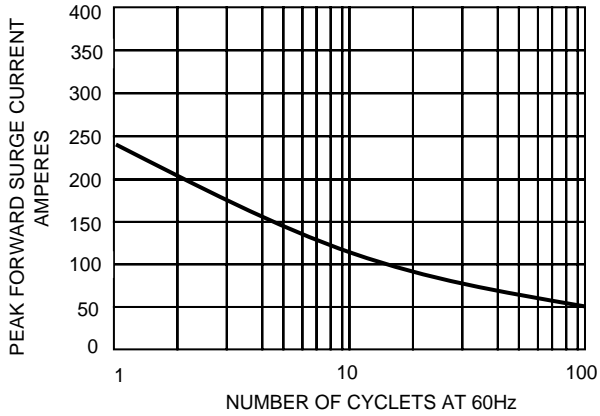


FIG.2- DERATING CURVE
OUTPUT RECTIFIED CURRENT

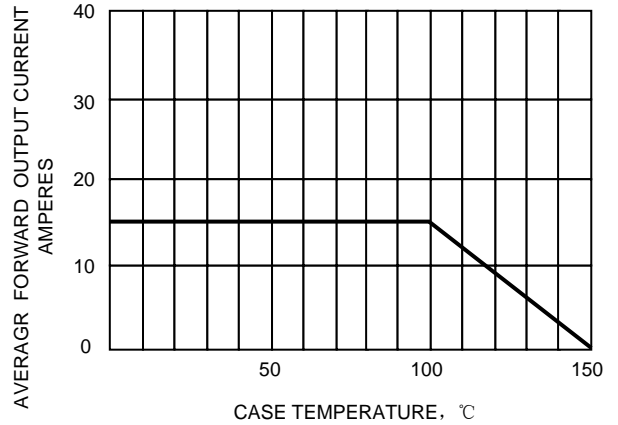


FIG.3-TYPICAL FORWARD
CHARACTERISTICS

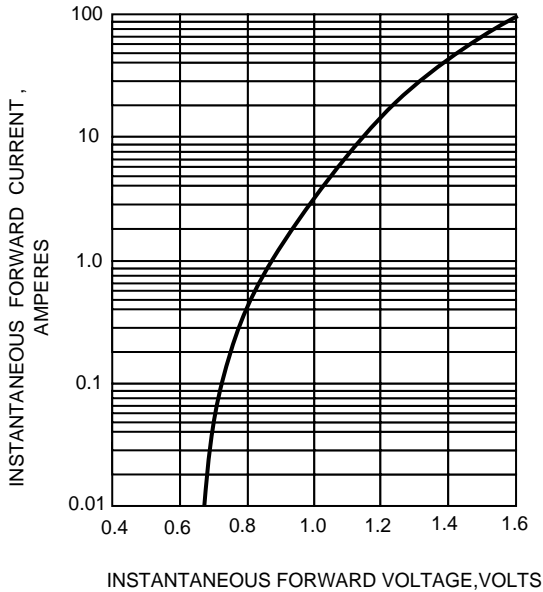


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

