

GBU15005 THRU GBU1510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
 REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 15 Ampere

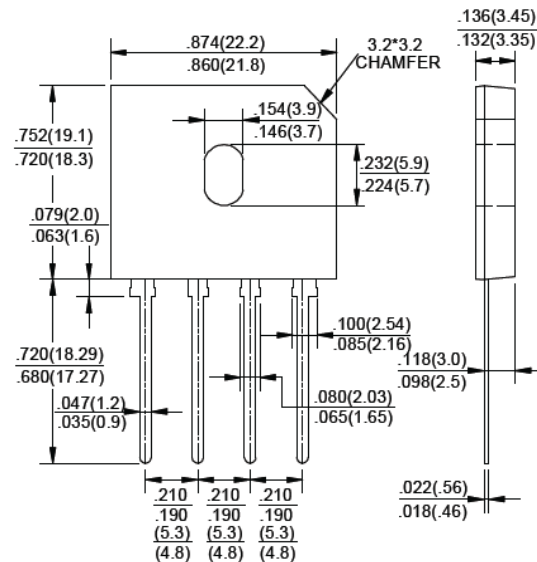
FEATURES

- ◆ 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 Volts

Mechanical Data

- ◆ Polarity : As marked on Body
- ◆ Weight : 0.15 ounces, 4.0 grams
- ◆ Mounting position : Any

GBU



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	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							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	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	5.0							μA
I ² t Rating for fusing (t < 8.3ms)	I ² t	166							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

Note: 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.

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RATING AND CHARACTERISTIC CURVES GBU15005 THRU GBU1510

FIG.1- DERATING CURVE
 OUTPUT RECTIFIED CURRENT

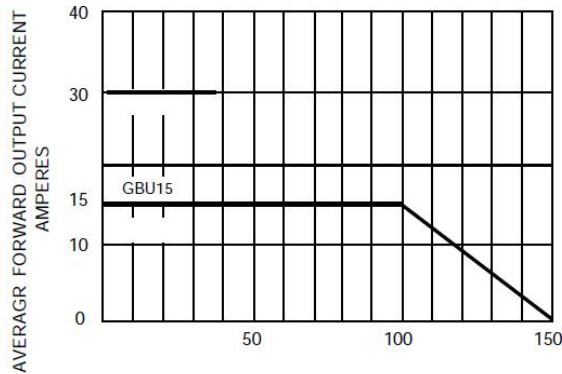


FIG.2-TYPICAL FORWARD
 CHARACTERISTICS

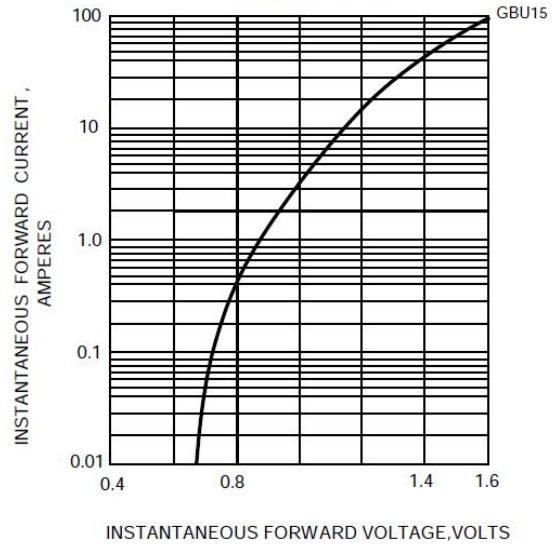


FIG.3-MAXIMUM FORWARD SURGE CURRENT

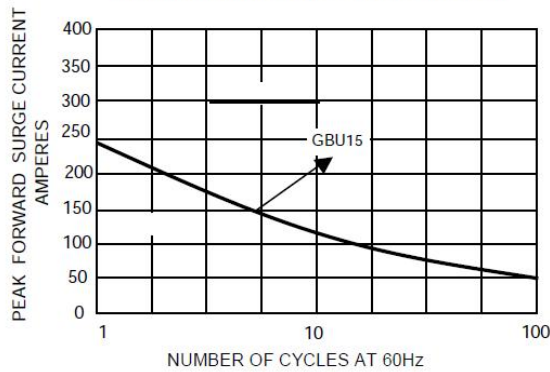


FIG.4-TYPICAL REVERSE
 CHARACTERISTICS

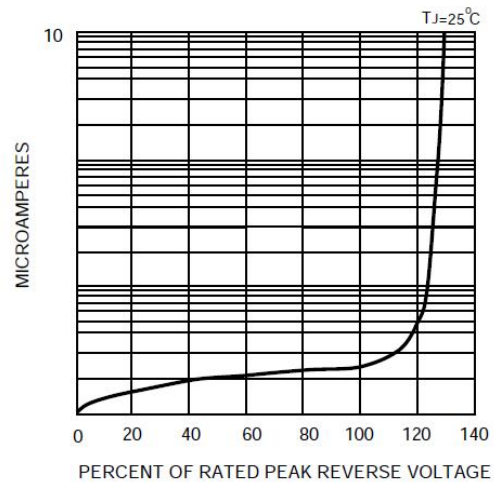
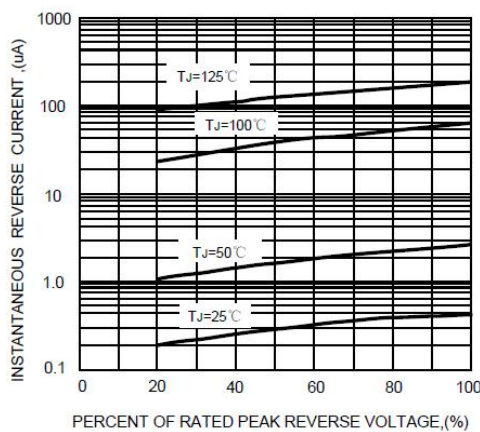


FIG.5-TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.