

GBU15005 THRU GBU1510

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

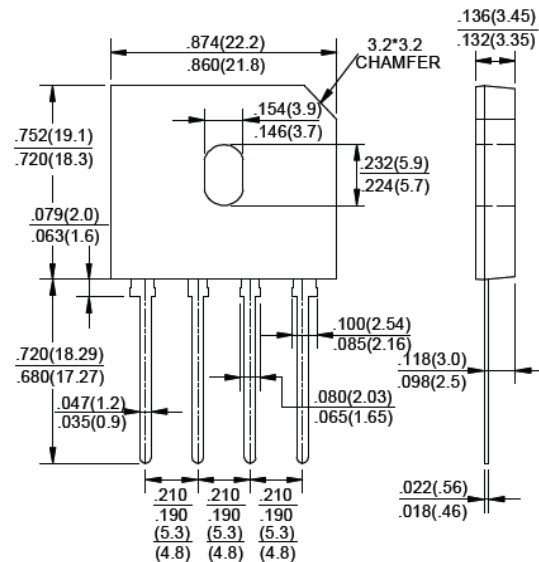
FEATURES

- ◆ 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, @ $T_C=100^\circ\text{C}$ (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 @ $T_J = 25^\circ\text{C}$ at Rated DC blocking voltage @ $T_J = 125^\circ\text{C}$	I_R	5.0 500							μA
I^2t Rating for fusing ($t < 8.3\text{ms}$)	I^2t	166							A^2S
Typical Junction Capacitance per element (Note 1)	C_J	50							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.0							$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

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.

GBU15005 THRU GBU1510

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

RATING AND CHARACTERISTIC CURVES GBU15005 THRU GBU1510

FIG.1- DERATING CURVE
 OUTPUT RECTIFIED CURRENT

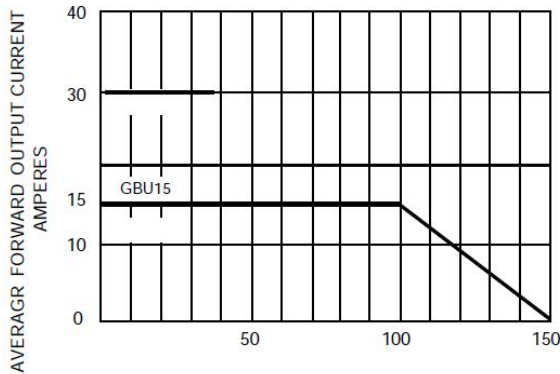


FIG.2-TYPICAL FORWARD
 CHARACTERISTICS

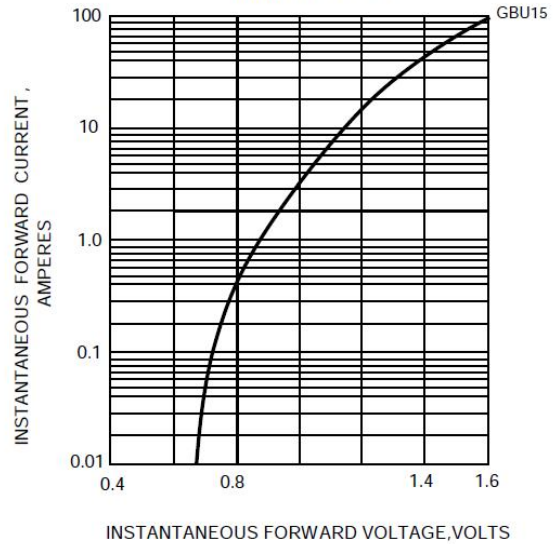


FIG.3-MAXIMUM FORWARD SURGE CURRENT

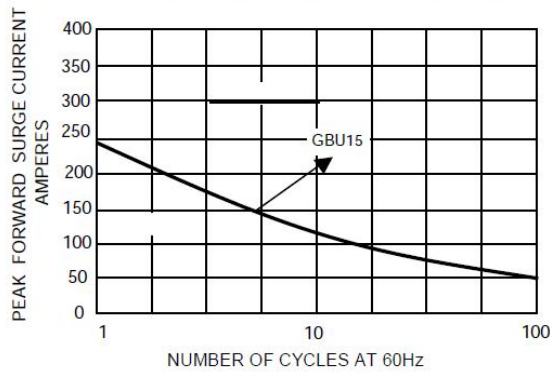


FIG.4-TYPICAL REVERSE
 CHARACTERISTICS

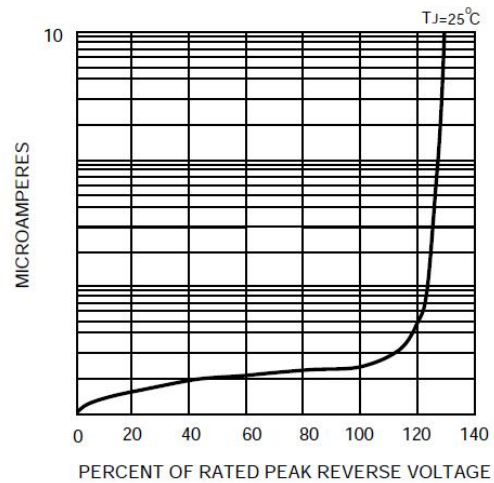
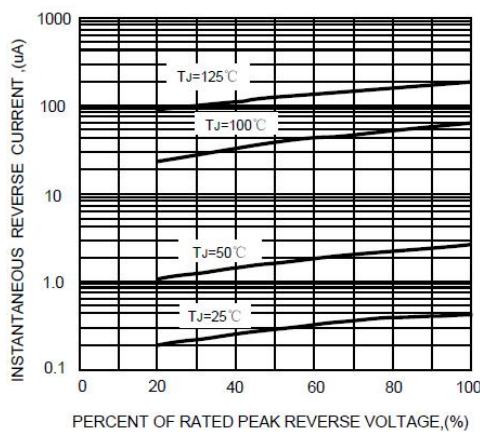


FIG.5-TYPICAL REVERSE CHARACTERISTICS



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