

GBU10005 THRU GB1010

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
 REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 10 Ampere

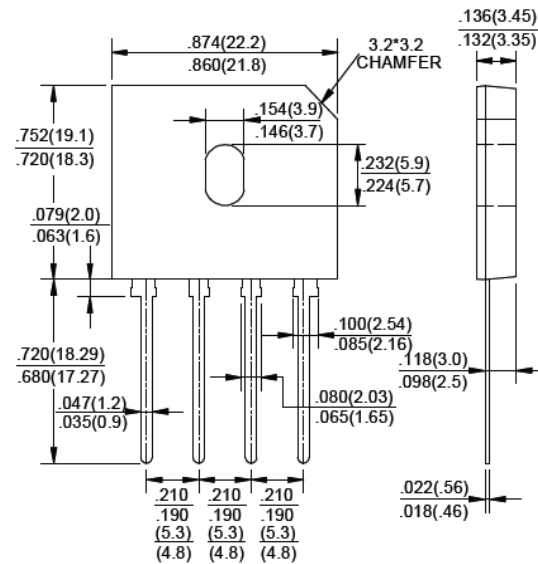
FEATURES

- ◆ 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 10005	GBU 1001	GBU 1002	GBU 1004	GBU 1006	GBU 1008	GBU 1010	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)	10								A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	220								A
Maximum Forward Voltage at 5.0A 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								μA
I ² t Rating for fusing (t < 8.3ms)	I ² t	200								A ² S
Typical Junction Capacitance per element (Note 1)	C _J	60								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 150mm x 150mm x 1.6mm Cu Plate Heatsink.

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RATING AND CHARACTERISTIC CURVES GBU10005 THRU GB1010

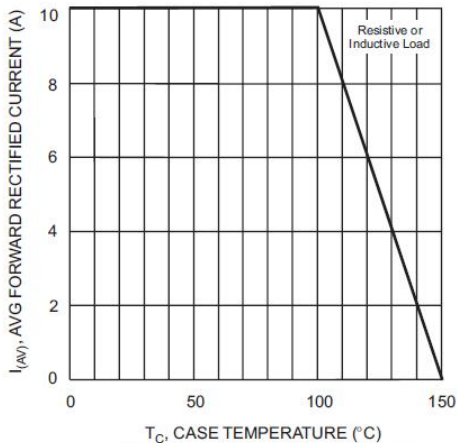


Fig. 1 Forward Current Derating Curve

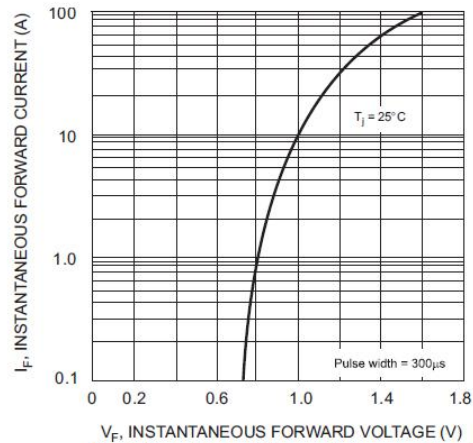


Fig. 2 Typical Forward Characteristics, per element

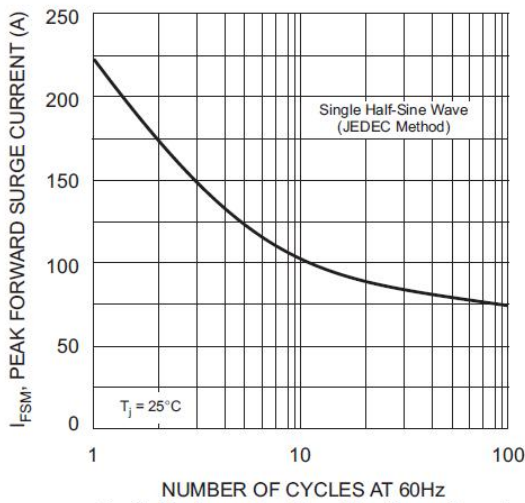


Fig. 3 Maximum Non-Repetitive Surge Current

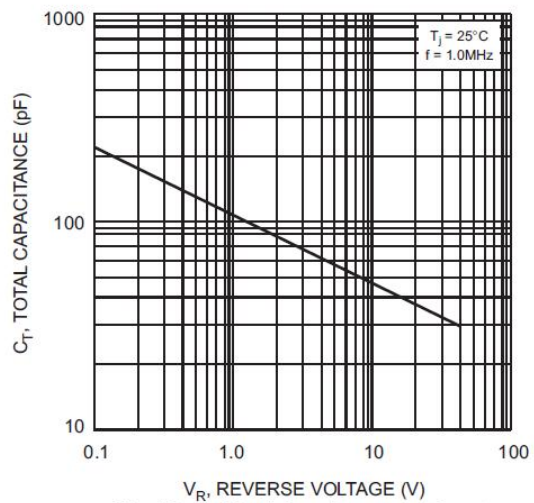
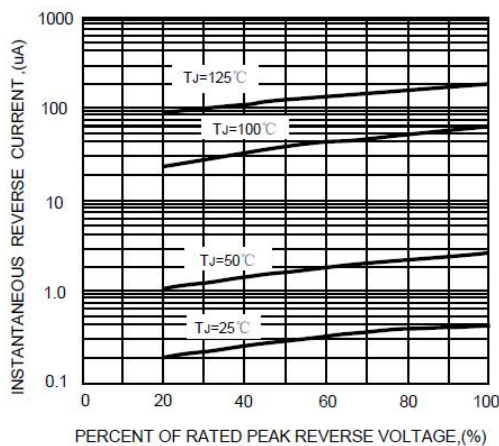


Fig. 4 Typical Total Capacitance, per element

FIG.5-TYPICAL REVERSE CHARACTERISTICS



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