

SMD Glass Passivated Bridge Rectifiers



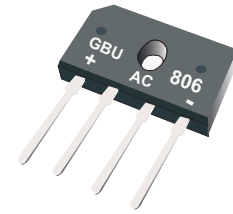
SMD Diodes Specialist

GBU8005-G Thru. GBU810-G

Reverse Voltage: 50 to 1000V

Forward Current: 8.0A

RoHS Device

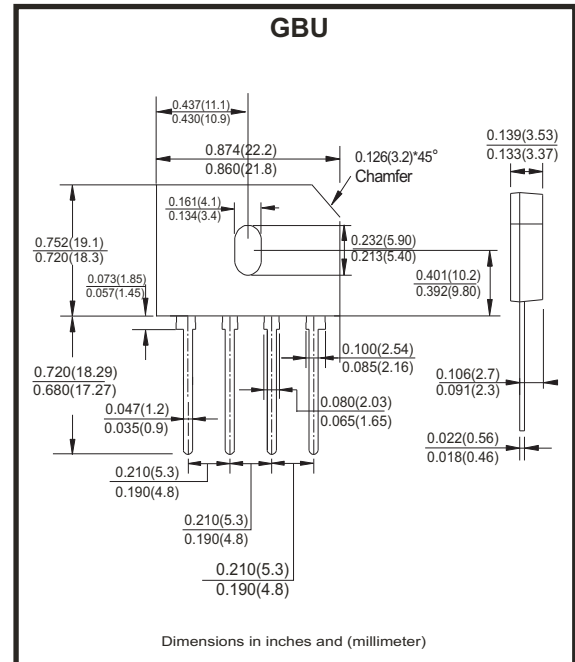


Features

- Rating to 1000V PRV
- Surge overload rating - 200 amperes peak.
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has underwriters laboratory flammability classification 94V-0

Mechanical Data

- Polarit:As marked on Body
- Mounting position:Any



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	GBU8005-G	GBU801-G	GBU802-G	GBU804-G	GBU806-G	GBU808-G	GBU810-G	Unit
	marking	GBU8005	GBU801	GBU802	GBU804	GBU806	GBU808	GBU810	
Maximum Reverse Peak Repetitive Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input 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 Note2) Rectified Current @Tc=100°C (without hestsink)	I_{AV}	8.0 3.2							A
Peak Forward Surage Current , 8.3ms Single Half Sine-Wave Super Imposed On Rated Load	I_{FSM}	200							A
Maximum Forward Voltage Drop Per Bridge Element at 4.0A Peak	V_F	1.1							V
Maximum Reverse Current @Tj=25°C At Rate DC Blocking Voltage @Tj=125°C	I_R	10.0 500							μA
I ² T Rating for Fusing(t<8.3ms)	I^2t	166							°C/W
Typical Junction Capacitandce Per Element (Note 1)	C_J	60							pF
Typical Thermal Resistance	$R_{\theta JA}$	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 75mm*75mm*1.6mm Cu plate heatsink.

REV:A

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Rating and Characteristics Curves (GBU8005-G Thru. GBU810-G)

Fig. 1- Forward Current Derating Curve

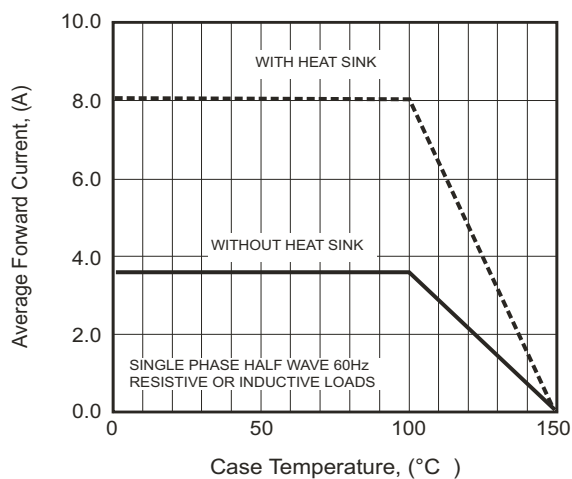


Fig. 2- Maximum NON-Repetitive Surge Current

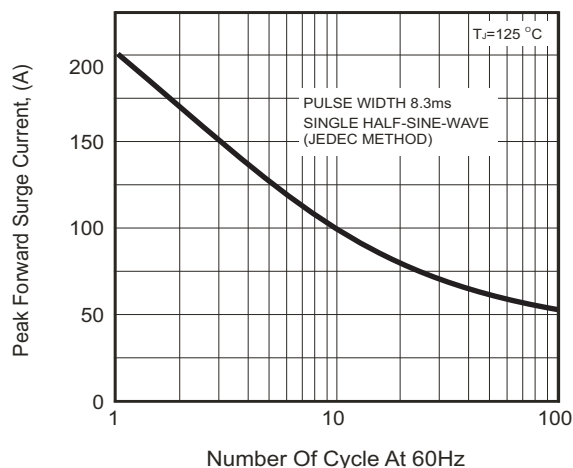


Fig. 3- Typical Junction Capacitance

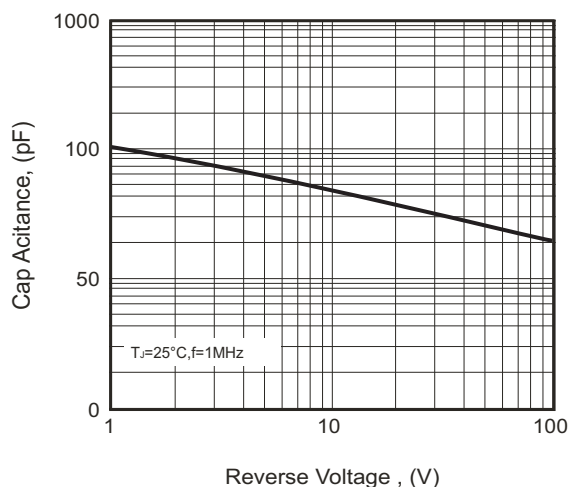


Fig. 4- Typical Forward Characteristics

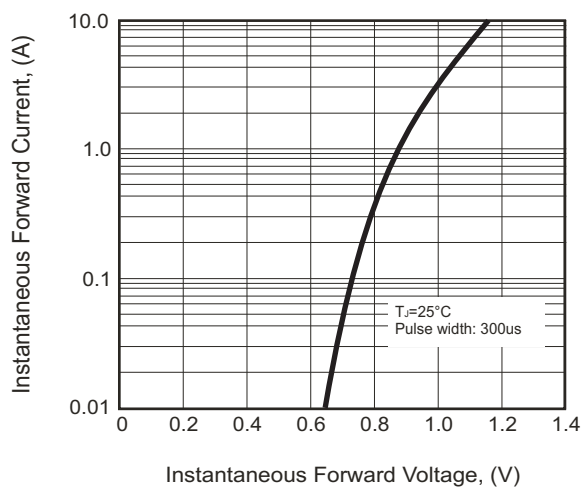
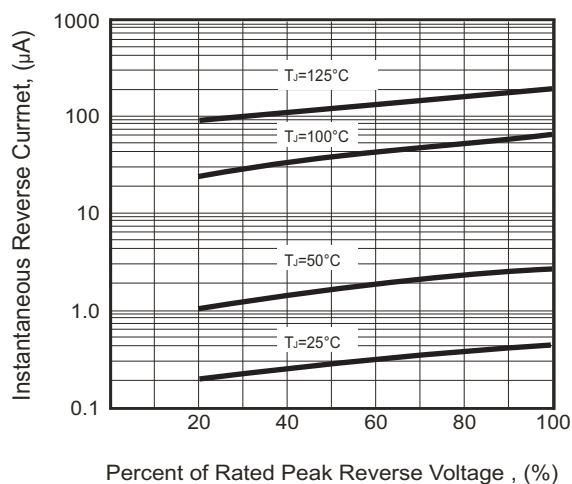


Fig. 5- Typical Reverse Characteristics



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Standard Package

Case Type	TUBE	TUBE SIZE	BOX	CARTON
	(EA)	(mm)	(EA)	(EA)
GBU	20	474*42*7	1000	4000