

## Glass Passivated Bridge Rectifier

**Voltage**

**1000 V**

**Current**

**8A**

### Features

- UL recognition file number E228882
- Ideal for printed circuit boards
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

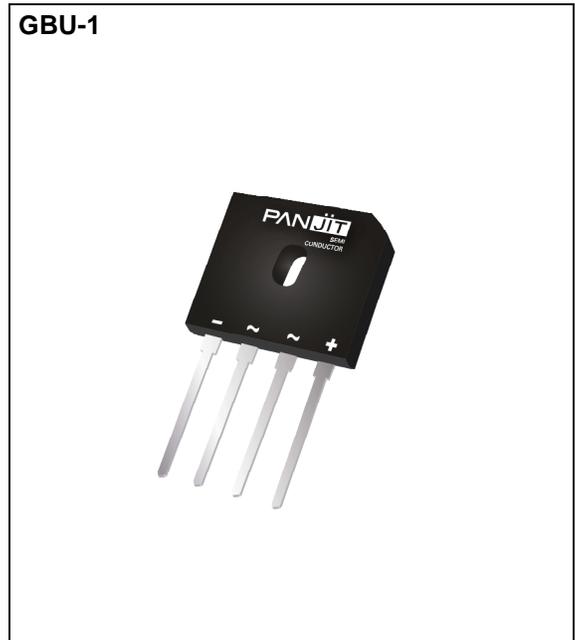
### Mechanical Data

- Case : GBU-1 Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.134 ounces, 3.8 grams

### Application

- Desktop/ Workstation – 80+ Silver & Gold Standard
- Server Power Supply – 90+ Platinum & Titanium Standard
- Home Appliances – Air Con
- Telecom Power Supply – Networking station, data center SMPS

GBU-1



**Maximum Ratings and Thermal Characteristics** ( $T_A = 25\text{ }^\circ\text{C}$  unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	1000	V
Maximum RMS Voltage	$V_{RMS}$	700	V
Maximum DC Blocking Voltage	$V_{DC}$	1000	V
Maximum Average Forward Current	$I_{F(AV)}$	8	A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25\text{ }^\circ\text{C}$ @ $T_A = 125\text{ }^\circ\text{C}$ $I_{FSM}$	180 144	A
Peak Forward Surge Current : 1.0 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25\text{ }^\circ\text{C}$ @ $T_A = 125\text{ }^\circ\text{C}$ $I_{FSM}$	360 288	A
$I^2 t$ rating for fusing ( $t = 8.3\text{ms}$ )	$I^2 t$	134.4	$A^2S$
Typical Junction Capacitance Measured at 1 MHz And Applied $V_R = 4\text{ V}$	$C_J$	72	pF
Typical Thermal Resistance <sup>(Note 2)</sup>	$R_{\theta JC}$	1.6	$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_J$	-55~150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55~150	$^\circ\text{C}$

**Electrical Characteristics** ( $T_A = 25\text{ }^\circ\text{C}$  unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	$V_F$	$I_F = 4\text{ A}, T_J = 25\text{ }^\circ\text{C}$	-	-	1.05	V
Reverse Current	$I_R$	$V_R = 1000\text{ V}, T_J = 25\text{ }^\circ\text{C}$	-	-	5	uA
		$V_R = 1000\text{ V}, T_J = 125\text{ }^\circ\text{C}$	-	-	500	

NOTES :

1. Mounted on a FR4 PCB standard pad
2. Device mounted on 150 mm \* 150 mm \* 1.6 mm Cu Plate heatsink.

TYPICAL CHARACTERISTIC CURVES

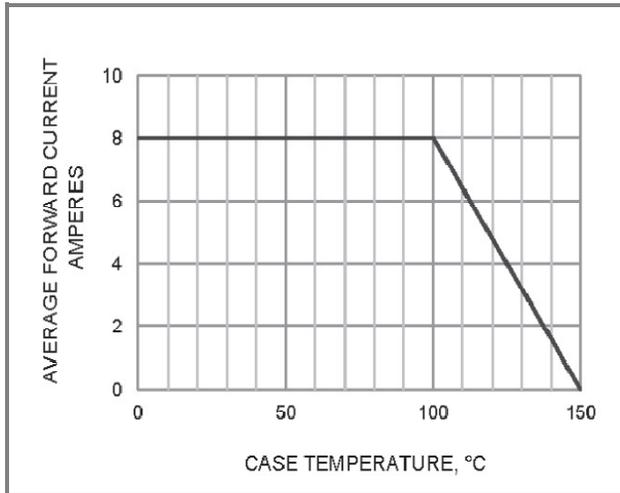


Fig.1 Forward Current Derating Curve

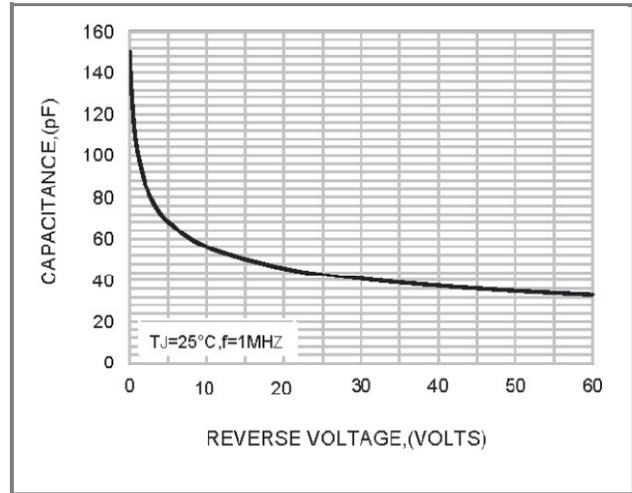


Fig.2 Typical Junction Capacitance

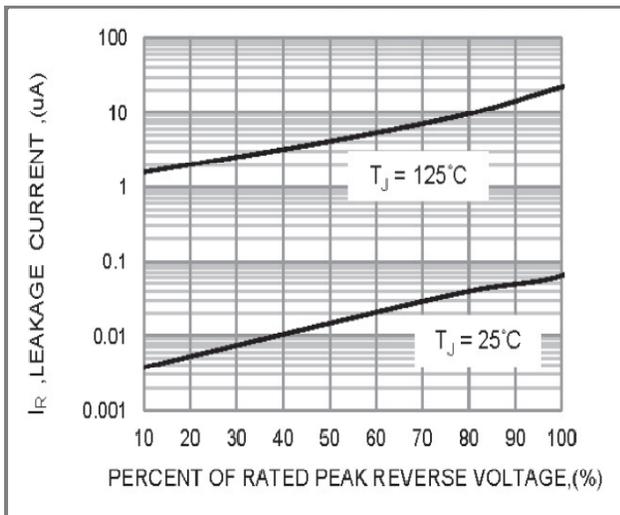


Fig.3 Typical Reverse Characteristics

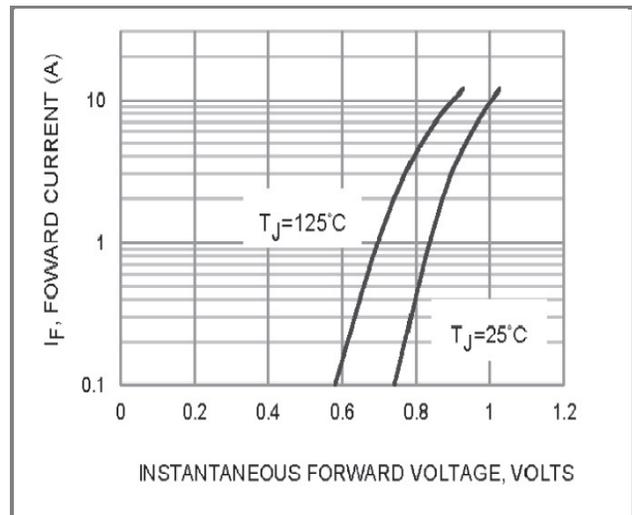
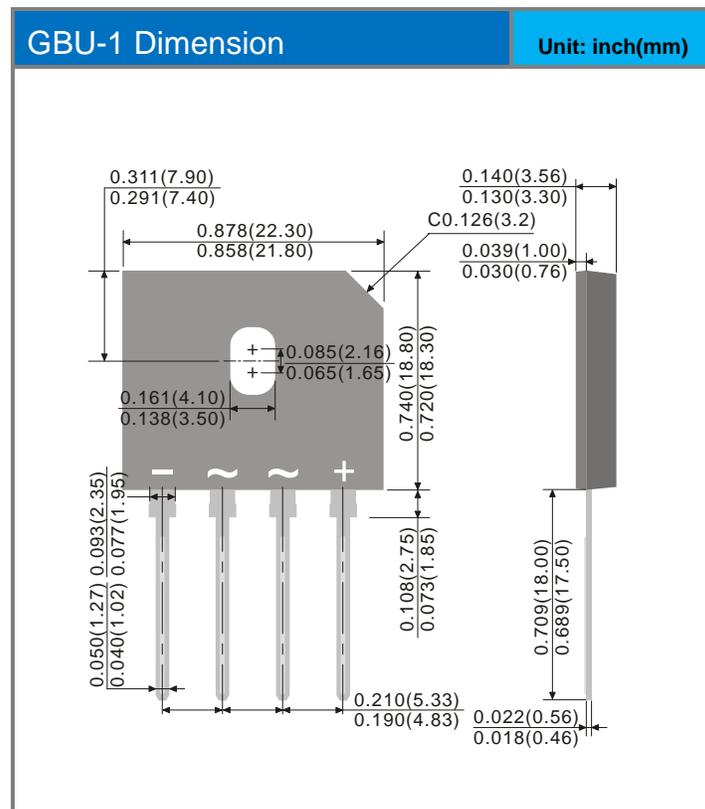


Fig.4 Typical Forward Characteristics

**Part No. Packing Code Version**

Part No. Packing Code	Package Type	Packing Type	Marking
GBU8MP_B0_00101	GBU-1	250 pcs / Box	GBU8MP

**Packaging Information**



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