

Glass Passivated Bridge Rectifier

Voltage

1000 V

Current

6A

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 : 0.138 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	$I_{F(AV)}$	6	A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	I_{FSM}	@ $T_A = 25\text{ }^\circ\text{C}$ 175	A
		@ $T_A = 125\text{ }^\circ\text{C}$ 140	
Peak Forward Surge Current : 1.0 ms Single Half Sine-Wave Superimposed On Rated Load	I_{FSM}	@ $T_A = 25\text{ }^\circ\text{C}$ 350	A
		@ $T_A = 125\text{ }^\circ\text{C}$ 280	
$I^2 t$ rating for fusing ($t = 8.3\text{ms}$)	$I^2 t$	127	A ² S
Typical Junction Capacitance Measured at 1 MHz And Applied $V_R = 4\text{ V}$	C_J	72	pF
Typical Thermal Resistance ^(Note 2)	$R_{\theta JC}$	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	$I_F = 3\text{ A}$, $T_J = 25\text{ }^\circ\text{C}$	-	-	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

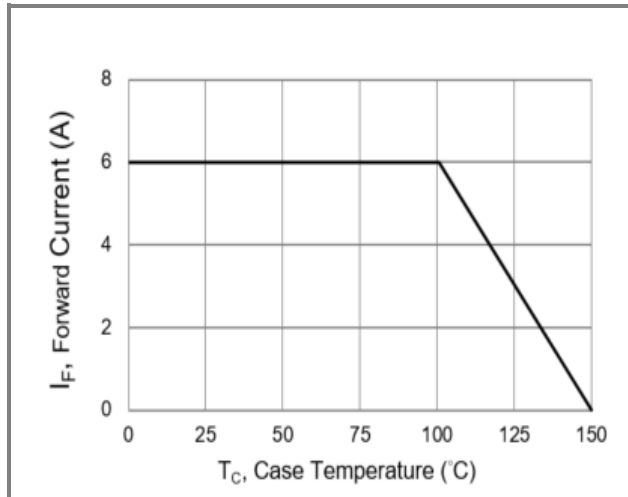


Fig.1 Forward Current Derating Curve

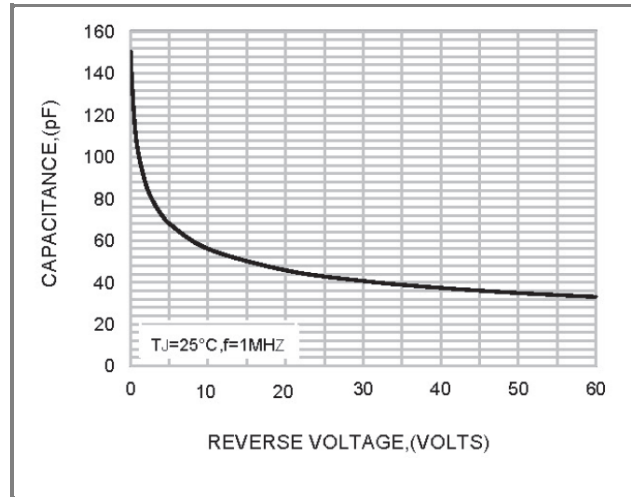


Fig.2 Typical Junction Capacitance

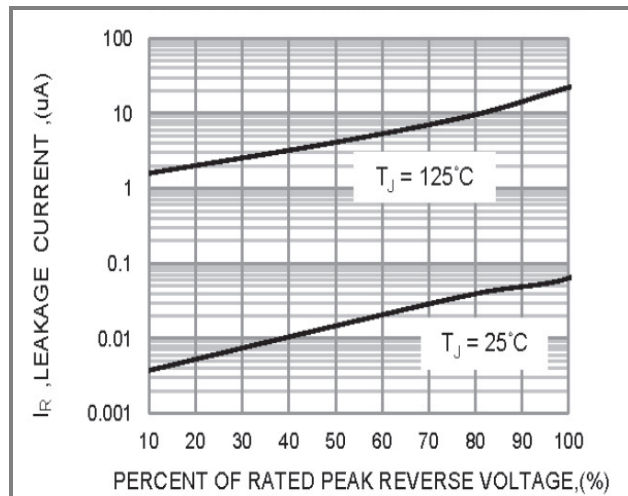


Fig.3 Typical Reverse Characteristics

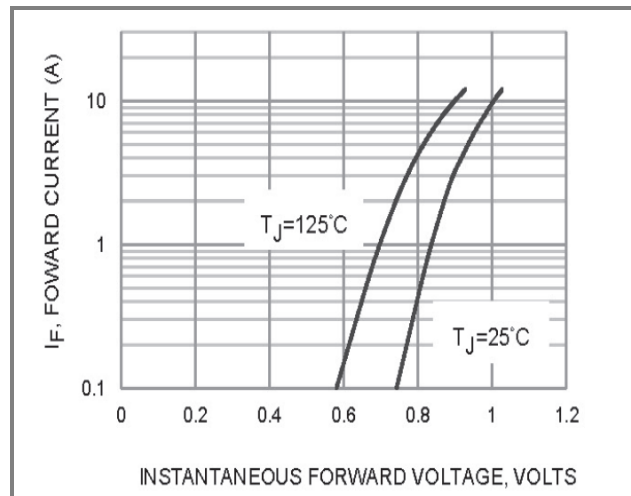


Fig.4 Typical Forward Characteristics

Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking
GBU6MP_BO_00101	GBU-1	250 pcs / Box	GBU6MP

Packaging Information

