

Glass Passivated Bridge Rectifier

Voltage

1000 V

Current

20A

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

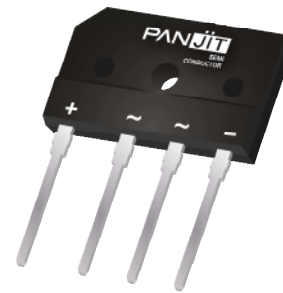
Mechanical Data

- Case : GBJ-1 Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.2395 ounces, 6.79 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
- Industrial Power Supply – Street Lighting, Synergy Panels

GBJ-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	$I_{F(AV)}$	20	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}	240 192	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}	480 384	A
$I^2 t$ rating for fusing ($t = 8.3\text{ms}$)	$I^2 t$	239	A ² S
Typical Junction Capacitance Measured at 1 MHz And Applied $V_R = 4\text{ V}$	C_J	79	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.0	$^\circ\text{C/W}$
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	$I_F = 10\text{ A}, T_J = 25\text{ }^\circ\text{C}$	-	-	1.0	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 150mm*150mm*1.6mm Cu Plate Heatsink.

TYPICAL CHARACTERISTIC CURVES

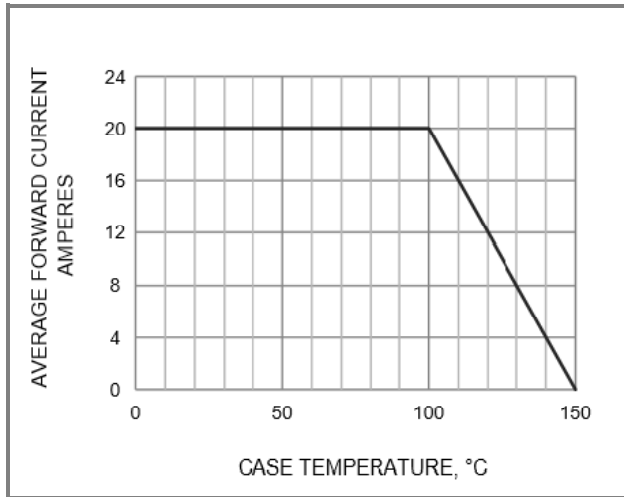


Fig.1 Forward Current Derating Curve

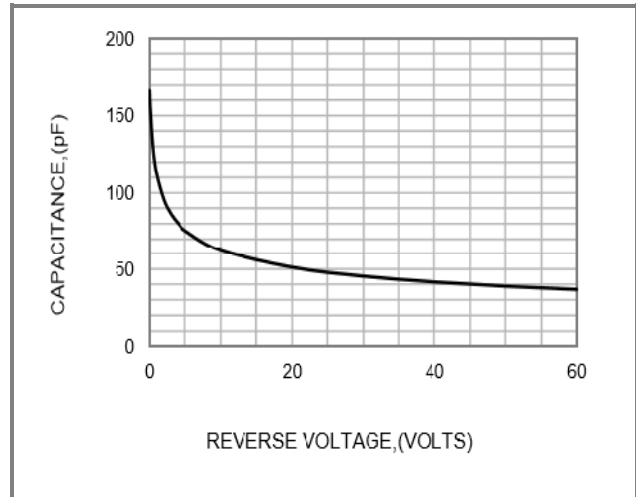


Fig.2 Typical Junction Capacitance

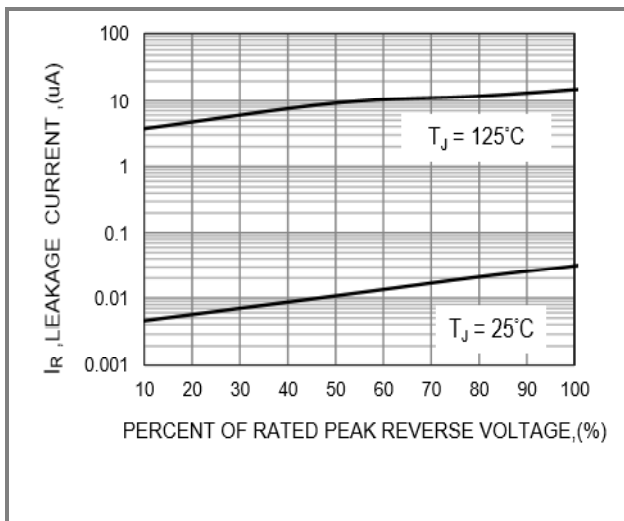


Fig.3 Typical Reverse Characteristics

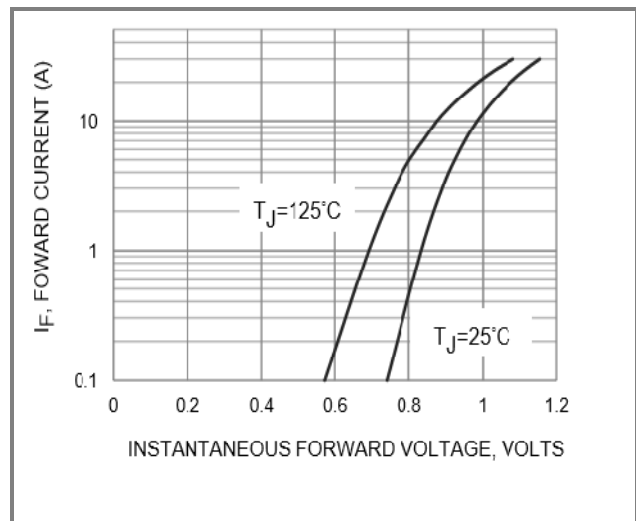
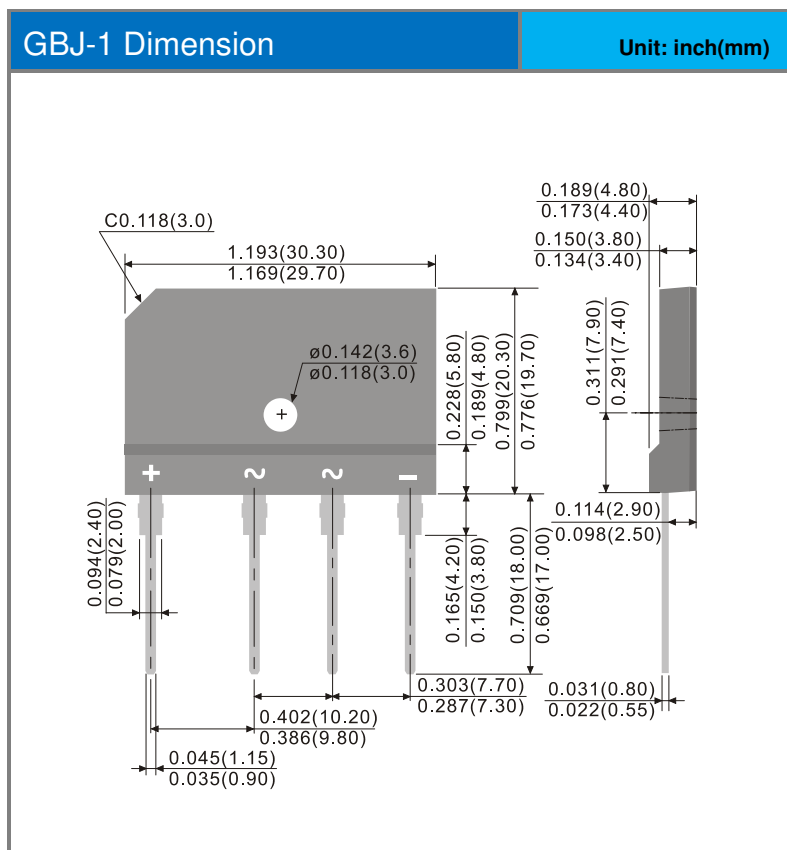


Fig.4 Typical Forward Characteristics

Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking
GBJ20M_B0_00101	GBJ-1	200 pcs / Box	GBJ20M

Packaging Information



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