

## **Glass Passivated Bridge Rectifier**

Voltage

1000 V

Current

10A

#### **Features**

• Ideal for printed circuit boards

- UL recognition file number E526209
- Lead free in compliance with EU RoHS 2.0
- Halogen-free according to IEC 61249 standard

#### **Mechanical Data**

• Case: GBJ-2 Package

• Terminals : Solderable per MIL-STD-750, Method 2026

• Approx. Weight: 6.6972 grams

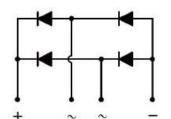
### **Application**

- Computing Power,
- Server Power/IND/EV
- Air Conditioner out door power board
- High Power/High Efficiency Power
- Home Appliances Power Board
- TV Power

Key Parameters			
Parameter	Value		
V <sub>RRM</sub>	1000V		
I <sub>F</sub> (AV)	10A		
I <sub>FSM</sub>	220A		
I <sub>R</sub>	5uA		
Package	GBJ-2		

# GBJ-2







# **Maximum Ratings and Thermal Characteristics** ( $T_A = 25$ °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS		
Maximum Repetitive Peak Reverse Voltage		V <sub>RRM</sub>	1000	V	
Maximum RMS Voltage		V <sub>RMS</sub>	700	V	
Maximum DC Blocking Voltage		V <sub>DC</sub>	1000	V	
Maximum Average Forward Current	With heatsink		10	_	
	Without heatsink	I <sub>F(AV)</sub>	3.5	A	
Peak Forward Surge Current: 8.3 ms	@ T <sub>A</sub> = 25 °C		220		
Single Half Sine-Wave Superimposed On Rated Load	@ T <sub>A</sub> = 125 °C	I <sub>FSM</sub>	176	_ A	
Peak Forward Surge Current : 1.0 ms	@ T <sub>A</sub> = 25 °C		410	А	
Single Half Square -Wave Superimposed On Rated Load	@ T <sub>A</sub> = 125 °C	IFSM	330		
I <sup>2</sup> t rating for fusing (t = 8.3ms)		I²t	200.8	A <sup>2</sup> S	
Typical Junction Capacitance Measured at 1 MHZ And Applied $V_R = 4 \text{ V}$	I	CJ	70	pF	
Typical Thermal Resistance (Note 1)		ReJA	8		
		Rejl	2	°C/W	
		R <sub>eJC</sub>	3		
Operating junction and storage temperature range		T <sub>J</sub> , T <sub>STG</sub>	-55~150	°C	
Mounting torque @ Recommend torque:5Kg.cm		Tor	8	Kg.cm	

# **Electrical Characteristics** (T<sub>A</sub> = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS	
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 5 A, T <sub>J</sub> = 25 °C	ı	ı	1.05	V	
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 1000 V, T <sub>J</sub> = 25 °C	-	-	5		
		V <sub>R</sub> = 1000 V,T <sub>J</sub> = 125 °C	-	-	100	uA	

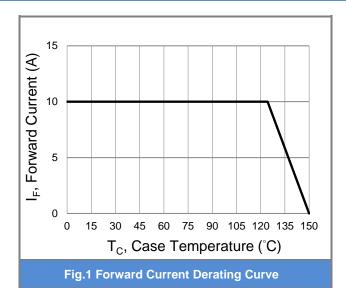
### NOTES:

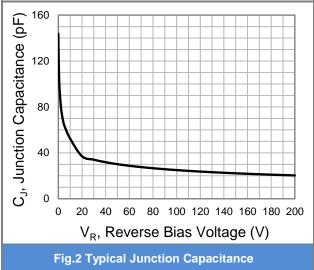
1. Device mounted on 10 cm \* 9.4 cm \* 2.6 cm Fin type heat sink.

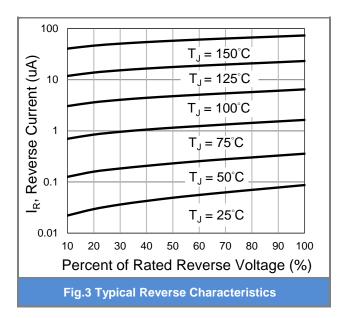
February 12,2025 GBJ1010-REV.02 Page 2

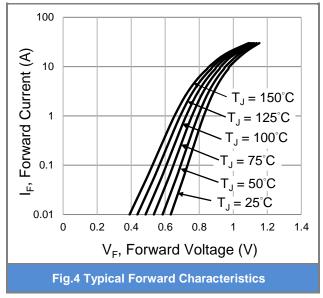


#### **TYPICAL CHARACTERISTIC CURVES**







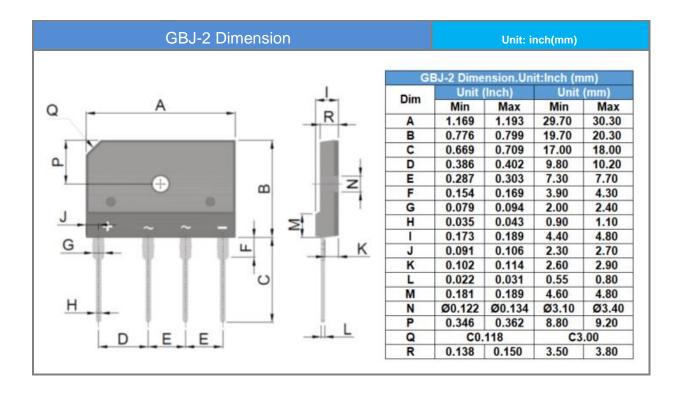




## **Product and Packing Information**

Part No.	Package Type	Packing Type	Marking
GBJ1010	GBJ-2	15 pcs / tube	GBJ1010

## **Packaging Information**



February 12,2025 GBJ1010-REV.02 Page 4



#### Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are
  responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no
  representation or warranty that such applications will be suitable for the specified use without further testing or
  modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.

February 12,2025 GBJ1010-REV.02 Page 5