

## 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

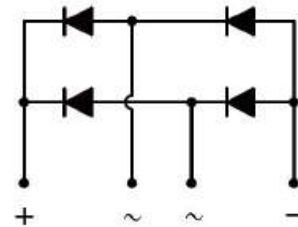
### Mechanical Data

- 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

## GBJ-2



Key Parameters	
Parameter	Value
$V_{RRM}$	<b>1000V</b>
$I_F(AV)$	<b>10A</b>
$I_{FSM}$	<b>220A</b>
$I_R$	<b>5uA</b>
<b>Package</b>	<b>GBJ-2</b>

**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	With heatsink	$I_{F(AV)}$	10	A
	Without heatsink		3.5	
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25\text{ }^\circ\text{C}$	$I_{FSM}$	220	A
	@ $T_A = 125\text{ }^\circ\text{C}$		176	
Peak Forward Surge Current : 1.0 ms Single Half Square -Wave Superimposed On Rated Load	@ $T_A = 25\text{ }^\circ\text{C}$	$I_{FSM}$	410	A
	@ $T_A = 125\text{ }^\circ\text{C}$		330	
$I^2 t$ rating for fusing ( $t = 8.3\text{ms}$ )		$I^2 t$	200.8	$\text{A}^2\text{S}$
Typical Junction Capacitance Measured at 1 MHz And Applied $V_R = 4\text{ V}$		$C_J$	70	pF
Typical Thermal Resistance (Note 1)		$R_{\theta JA}$	8	$^\circ\text{C/W}$
		$R_{\theta JL}$	2	
		$R_{\theta JC}$	3	
Operating junction and storage temperature range		$T_J, T_{STG}$	-55~150	$^\circ\text{C}$
Mounting torque @ Recommend torque:5Kg.cm		Tor	8	Kg.cm

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

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	$V_F$	$I_F = 5\text{ A}, T_J = 25\text{ }^\circ\text{C}$	-	-	1.05	V
Reverse Current	$I_R$	$V_R = 1000\text{ V}, T_J = 25\text{ }^\circ\text{C}$	-	-	5	uA
		$V_R = 1000\text{ V}, T_J = 125\text{ }^\circ\text{C}$	-	-	100	

NOTES :

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

TYPICAL CHARACTERISTIC CURVES

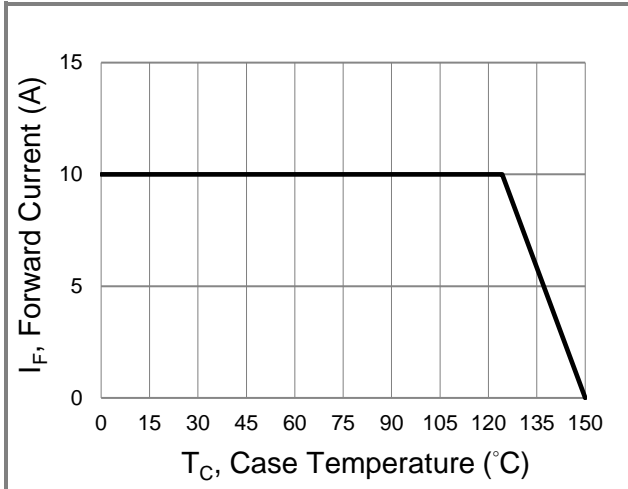


Fig.1 Forward Current Derating Curve

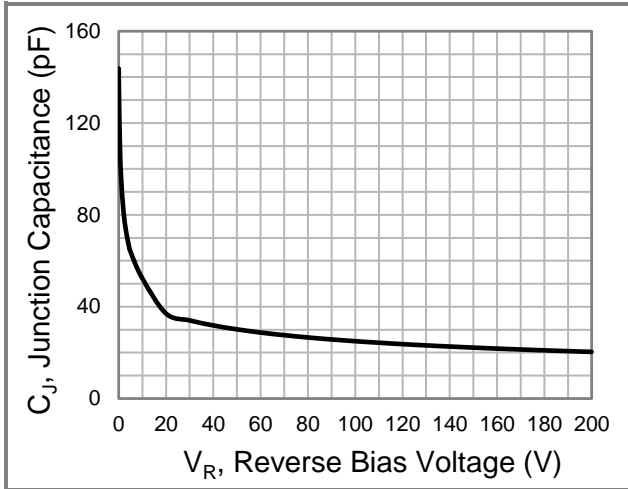


Fig.2 Typical Junction Capacitance

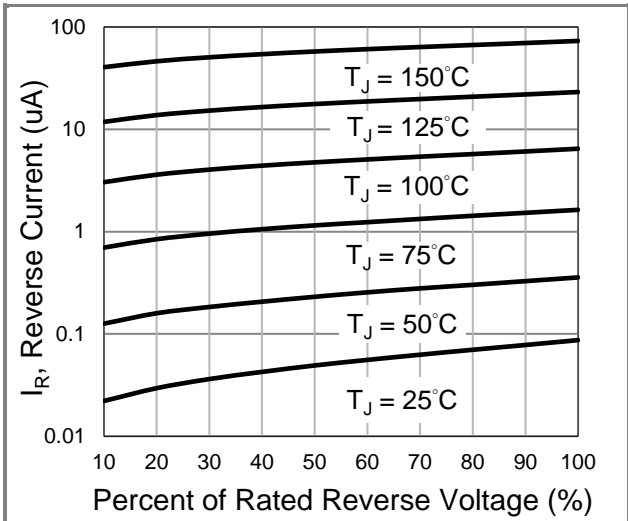


Fig.3 Typical Reverse Characteristics

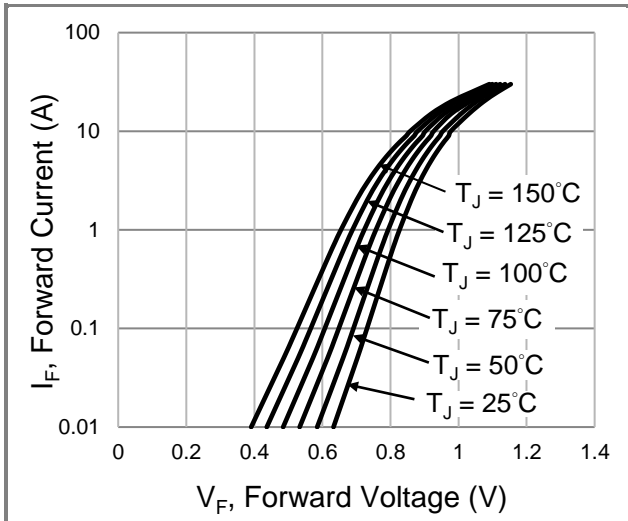
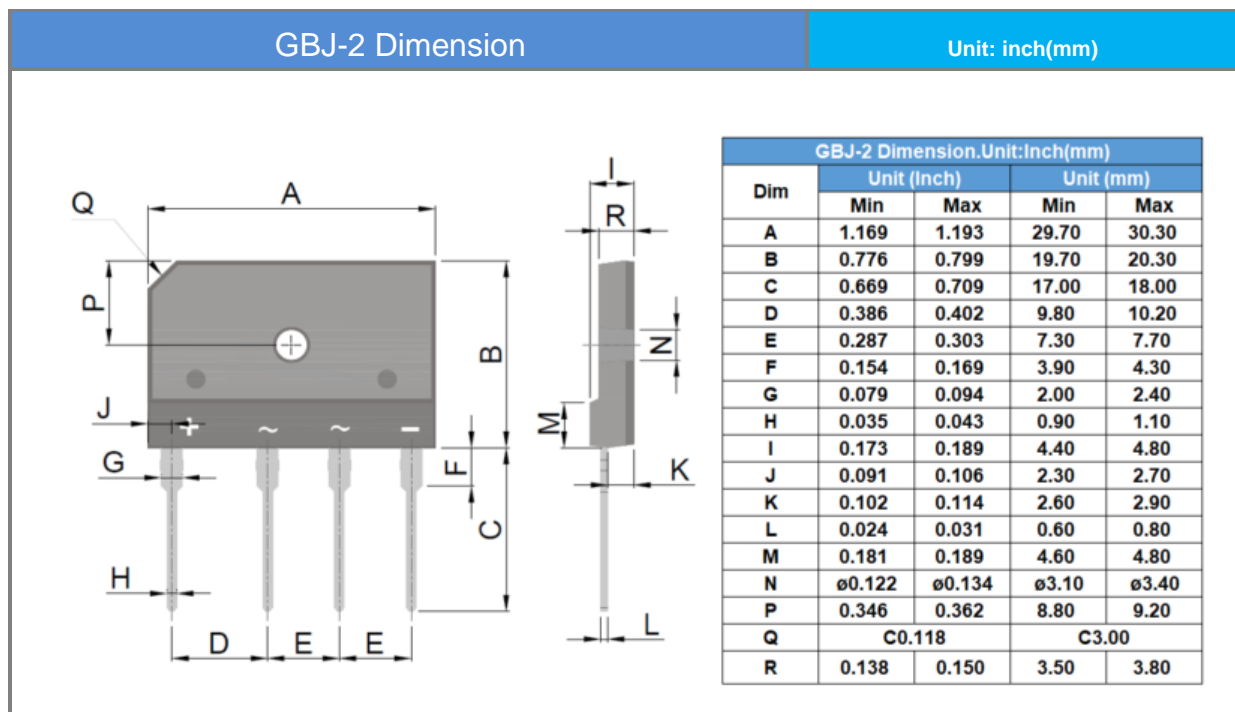


Fig.4 Typical Forward Characteristics

**Part No. Marking Code Version**

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

**Packaging Information**



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