

## Glass Passivated Bridge Rectifier

**Voltage**

**1000 V**

**Current**

**35A**

### Features

- Glass passivated chip junction
- Superior thermal conductivity
- Lead free in compliance with EU RoHS 2.0
- Halogen-free according to IEC 61249 standard



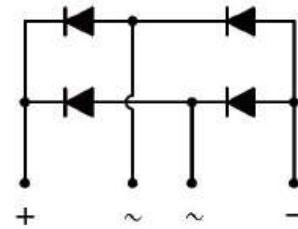
### Mechanical Data

- Case : GBJ-2 Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 6.6972 grams

### Application

- Computing Power / Desktop Power
- Game Console Power
- Server Power
- Air Conditioner out door power board
- High Power/High Efficiency Power
- Home Appliances Power Board

## GBJ-2



Key Parameters	
Parameter	Value
$V_{RRM}$	<b>1000V</b>
$I_F(AV)$	<b>35A</b>
$I_{FSM}$	<b>400A</b>
$I_R$	<b>5uA</b>
$T_J \text{ max.}$	<b>175°C</b>
<b>Package</b>	<b>GBJ-2</b>

**Maximum Ratings and Thermal Characteristics** ( $T_A = 25^\circ\text{C}$  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	$I_{F(AV)}$	35	A
	Without heatsink		5	
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25^\circ\text{C}$	$I_{FSM}$	400	A
	@ $T_A = 125^\circ\text{C}$		320	
Peak Forward Surge Current : 1.0 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25^\circ\text{C}$	$I_{FSM}$	800	A
	@ $T_A = 125^\circ\text{C}$		640	
$I^2 t$ rating for fusing ( $t = 8.3\text{ms}$ )		$I^2 t$	664	$\text{A}^2\text{S}$
Typical Junction Capacitance Measured at 1 MHZ And Applied $V_R = 4\text{ V}$		$C_J$	130	pF
Typical Thermal Resistance (Note 1) (with heatsink)		$R_{\theta JA}$	5	$^\circ\text{C/W}$
		$R_{\theta JL}$	2	
		$R_{\theta JC}$	1	
Operating junction and storage temperature range		$T_J, T_{STG}$	-55~175	$^\circ\text{C}$
Mounting torque @ Recommend torque:5Kg.cm		Tor	8	Kg.cm

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

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	$V_F$	$I_F = 17.5\text{ A}, T_J = 25^\circ\text{C}$	-	-	1.05	V
Reverse Current	$I_R$	$V_R = 1000\text{ V}, T_J = 25^\circ\text{C}$	-	-	5	uA
		$V_R = 1000\text{ V}, T_J = 125^\circ\text{C}$	-	-	100	

NOTES :

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

TYPICAL CHARACTERISTIC CURVES

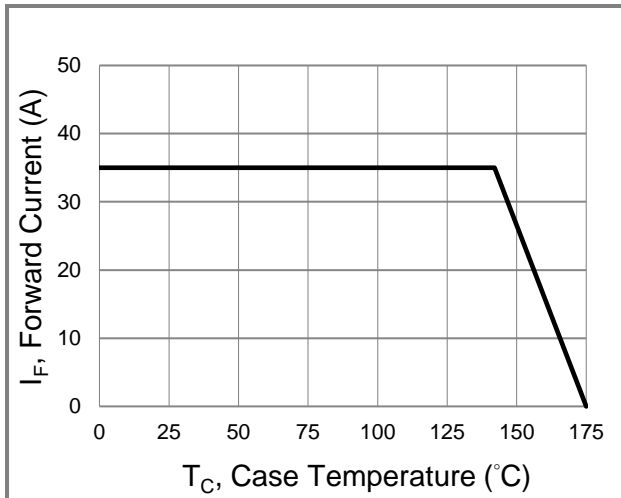


Fig.1 Forward Current Derating Curve

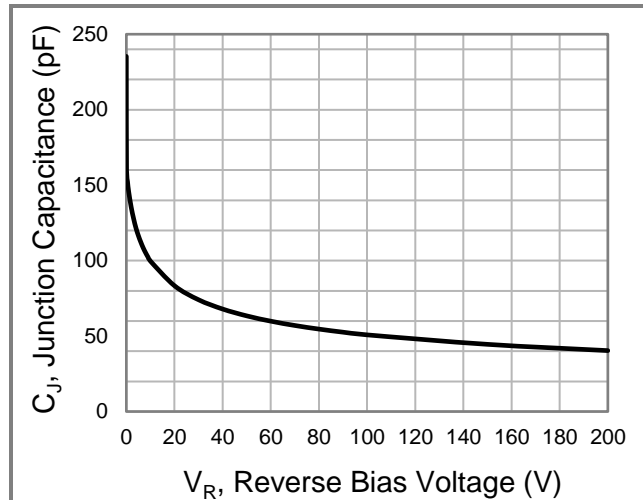


Fig.2 Typical Junction Capacitance

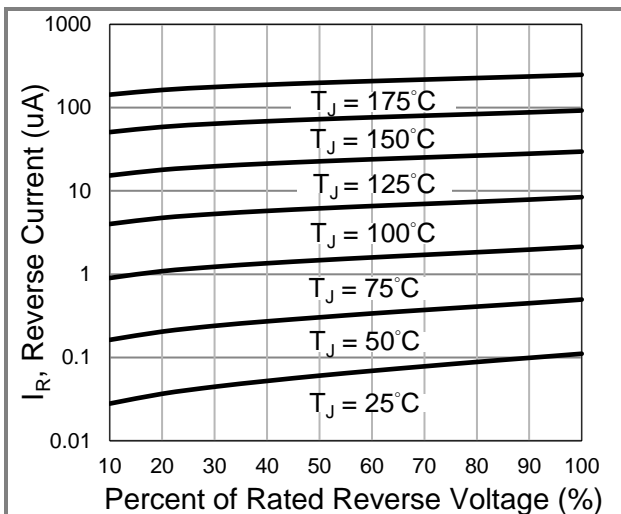


Fig.3 Typical Reverse Characteristics

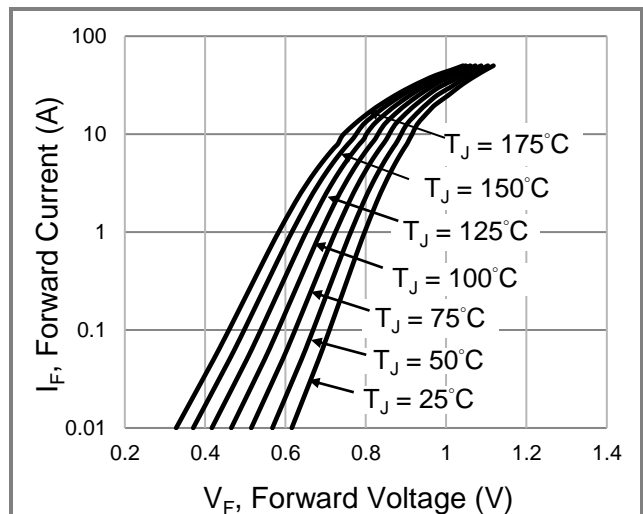
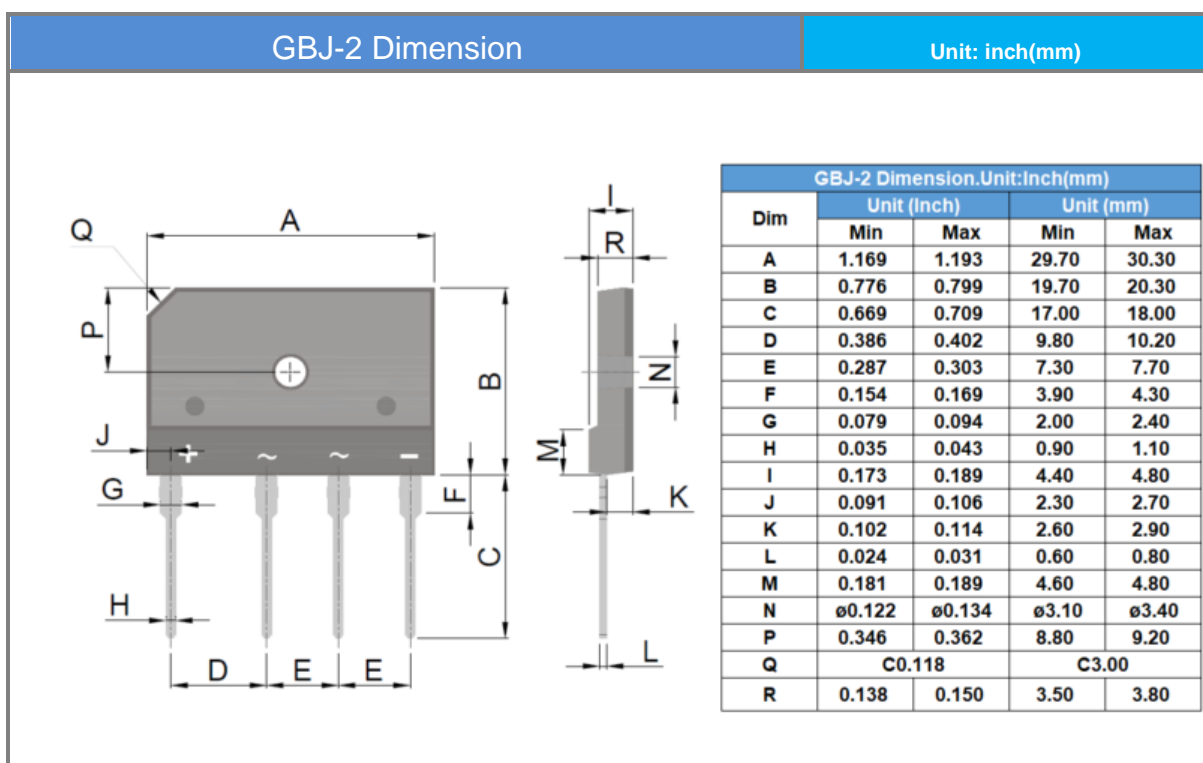


Fig.4 Typical Forward Characteristics

## Product and Packing Information

Part No.	Package Type	Packing Type	Marking
GBJ3510H	GBJ-2	15 pcs / tube	GBJ3510H

## Packaging Information



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