# Glass Passivated Low VF Bridge Rectifier

Current

20A

HF

Voltage

Features

- Glass passivated chip junction
- Low forward voltage drop
- Lead free in compliance with EU RoHS 2.0

800 V

• Halogen-free according to IEC 61249 standard

### **Mechanical Data**

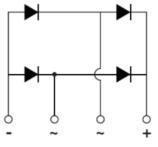
- Case : GBU-2 Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 3.8348 grams

### 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

Key Parameters				
Parameter	Value			
V <sub>RRM</sub>	800V			
I <sub>F</sub> (AV)	20A			
I <sub>FSM</sub>	400A			
V <sub>F</sub> @125°C,(typ)	0.82V			
I <sub>R</sub>	5uA			
Package	GBU-2			









### Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25 °C unless otherwise noted)

PARAMETER		SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Volt	age	Vrrm	800	V
Maximum RMS Voltage		V <sub>RMS</sub>	560	V
Maximum DC Blocking Voltage		V <sub>DC</sub>	800	V
Maximum Average Forward Current	With heatsink		20	
	Without heatsink	IF(AV)	3.5	A
Peak Forward Surge Current : 8.3 ms	@ T <sub>A</sub> = 25 °C		400	
Single Half Sine-Wave Superimposed On Rated Load Peak Forward Surge Current : 1.0 ms	@ T <sub>A</sub> = 125 °C	IFSM	320	A
Peak Forward Surge Current : 1.0 ms Single Half Sine-Wave Superimposed	@ T <sub>A</sub> = 25 °C		800	
	@ T <sub>A</sub> = 125 °C	IFSM	640	A
$I^2$ t rating for fusing (t = 8.3ms)		l²t	664	A <sup>2</sup> S
Typical Junction Capacitance Measured at 1 MHZ And Applied $V_R = 4$	V	Сл	140	pF
	R <sub>0JA</sub>	5		
Typical Thermal Resistance (Note 1) (with heatsink)		Rejl	3	°C/W
	R <sub>0JC</sub> 2			
Operating junction and storage temperature range		TJ, TSTG	-55~150	٥C
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	VF	I <sub>F</sub> = 10 A, T <sub>J</sub> = 25 °C	-	-	0.92	V	
		I⊧ = 10 A, T」 = 125 °C	-	0.82	-		
Reverse Current	IR	V <sub>R</sub> = 800 V, T <sub>J</sub> = 25 °C	-	-	5	uA	
		V <sub>R</sub> = 800 V,T <sub>J</sub> = 125 °C	-	-	100		

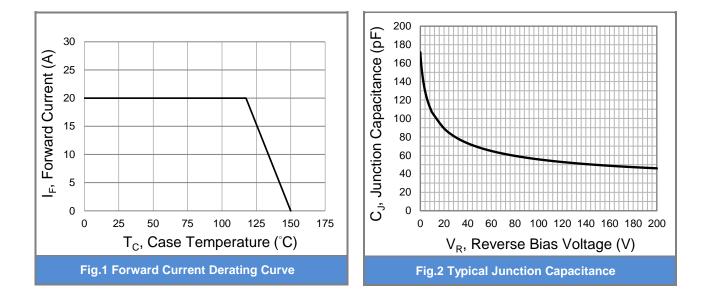
NOTES :

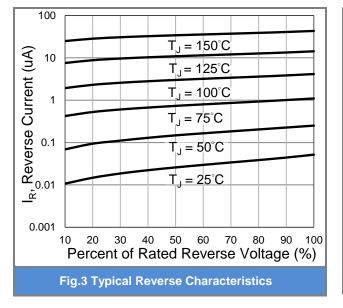
1. Device mounted on 10 cm \* 9.4 cm \* 2.6 cm Fin type heat sink .

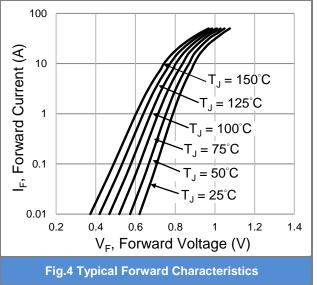




#### **TYPICAL CHARACTERISTIC CURVES**









## Part No. Marking Code Version

Approved Part No.	Package Type	Packing Type	Marking
GBU2008LV	GBU-2	20 pcs / tube	GBU2008LV

### Packaging Information

GBU-2 Dimension				Unit: inch(m	ım)										
A	GBU-2 Dimension.Unit:Inch(mm)														
	Unit		Unit		Unit		Uni		Unit		Unit (Inch)		(Inch)	Unit	(mm)
	Dim	Min	Max	Min	Max										
	Α	0.854	0.878	21.70	22.30										
	в	0.720	0.740	18.30	18.80										
	С	0.689	0.709	17.50	18.00										
	D	0.190	0.210	4.83	5.33										
	Е	0.291	0.311	7.40	7.90										
- ~ ~ +	F	0.089	0.108	2.25	2.75										
ju <u>i</u>     [	G	0.077	0.093	1.95	2.35										
G K	н	0.040	0.050	1.02	1.27										
	1	0.130	0.138	3.30	3.50										
	J	0.065	0.085	1.65	2.15										
	к	0.030	0.039	0.76	1.00										
- <u>-</u>	L	0.018	0.022	0.45	0.55										
	М	0.138	0.161	3.50	4.10										
	N	0.12	5*45°	3.17	*45°										



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