

Glass Passivated Low VF Bridge Rectifier

GBU-2

Voltage	800 V	Current	25A
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Features



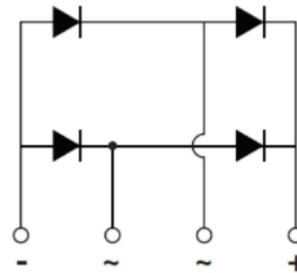
- Glass passivated chip junction
- Low forward voltage drop
- Lead free in compliance with EU RoHS 2.0
- Halogen-free according to IEC 61249 standard

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_{RRM}	800V
$I_F(AV)$	25A
I_{FSM}	400A
$V_F@125^{\circ}C,(typ)$	0.8V
I_R	5uA
Package	GBU-2

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}	800	V
Maximum RMS Voltage	V_{RMS}	560	V
Maximum DC Blocking Voltage	V_{DC}	800	V
Maximum Average Forward Current	With heatsink	25	A
	Without heatsink	3.2	
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25\text{ }^\circ\text{C}$	400	A
	@ $T_A = 125\text{ }^\circ\text{C}$	320	
Peak Forward Surge Current : 1.0 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25\text{ }^\circ\text{C}$	800	A
	@ $T_A = 125\text{ }^\circ\text{C}$	640	
$I^2 t$ rating for fusing ($t = 8.3\text{ms}$)	$I^2 t$	664	A^2S
Typical Junction Capacitance Measured at 1 MHz And Applied $V_R = 4\text{ V}$	C_J	220	pF
Typical Thermal Resistance (Note 1) (with heatsink)	$R_{\theta JA}$	6	$^\circ\text{C/W}$
	$R_{\theta JL}$	3	
	$R_{\theta JC}$	2	
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	$I_F = 12.5\text{ A}, T_J = 25\text{ }^\circ\text{C}$	-	-	0.95	V
		$I_F = 12.5\text{ A}, T_J = 125\text{ }^\circ\text{C}$	-	0.8	-	
Reverse Current	I_R	$V_R = 800\text{ V}, T_J = 25\text{ }^\circ\text{C}$	-	-	5	uA
		$V_R = 800\text{ V}, T_J = 125\text{ }^\circ\text{C}$	-	-	100	

NOTES :

1. Device mounted on 100 mm * 94 mm * 26 mm Fin type heat sink .

TYPICAL CHARACTERISTIC CURVES

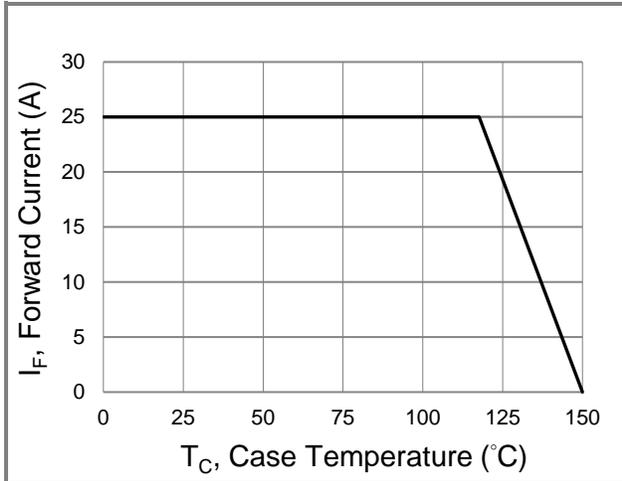


Fig.1 Forward Current Derating Curve

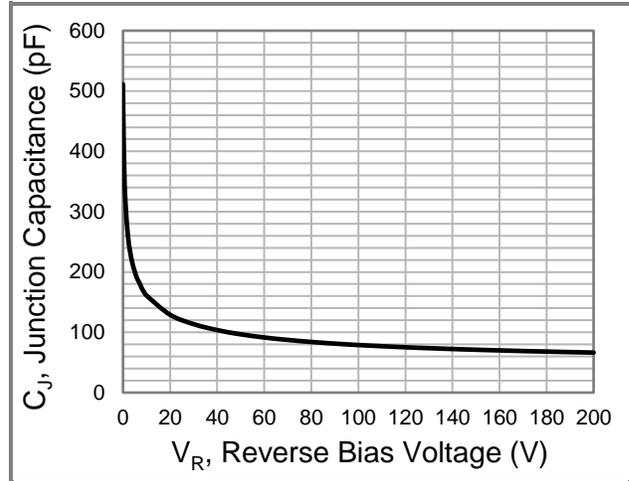


Fig.2 Typical Junction Capacitance

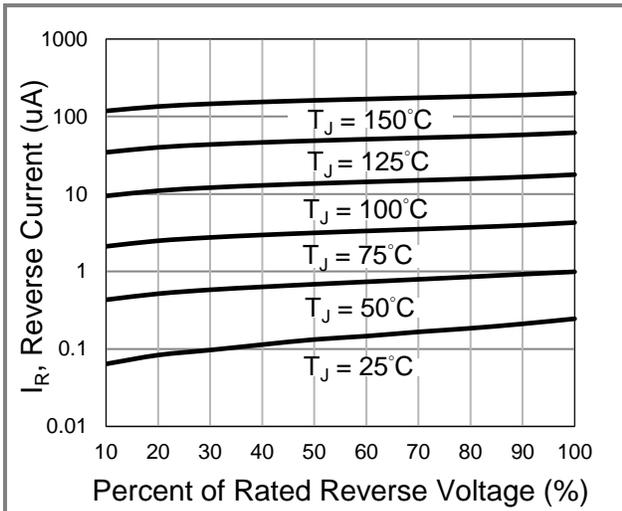


Fig.3 Typical Reverse Characteristics

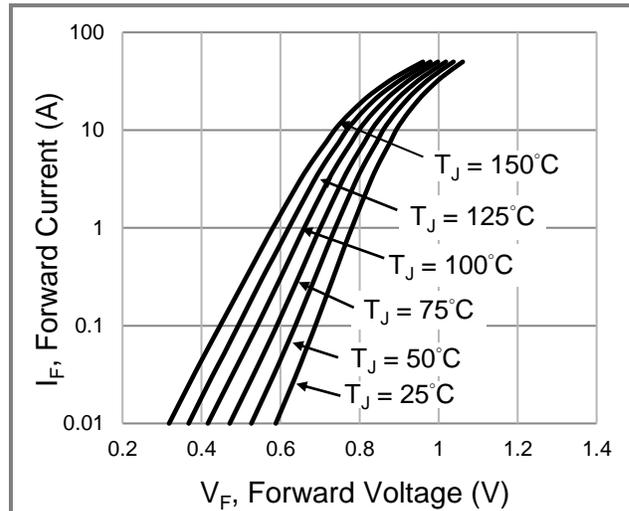
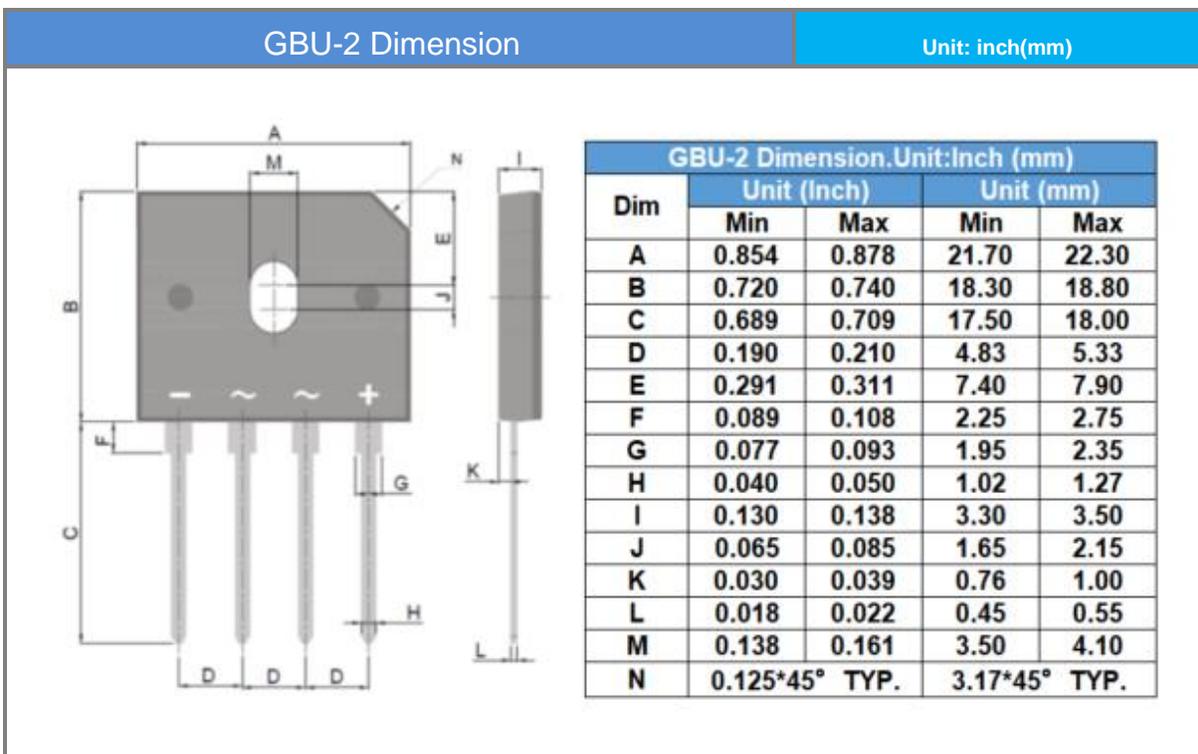


Fig.4 Typical Forward Characteristics

Product and Packing Information

Part No.	Package Type	Packing Type	Marking
GBU2508LL	GBU-2	20 pcs / tube	GBU2508LL

Packaging Information



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