

## 800V With High Tj Ultra Low VF Bridge Rectifier

**Voltage**

**800 V**

**Current**

**35A**

### Features



- Oxide planar chip junction
- Low forward voltage drop (VF@0.72V)
- Low leakage current (IR@20uA)
- Lead free in compliance with EU RoHS 2.0
- Halogen-free according to IEC 61249 standard

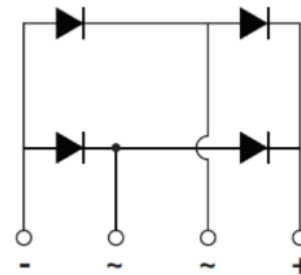
### Mechanical Data

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

### Application

- Power: / Server / AI / IND
- PC Power: 80+Platinum / Titanium
- Power: Redundant / Telecom
- Gaming Power: NB / PC
- PD > 100W

## GBU-2



Key Parameters	
Parameter	Value
$V_{RRM}$	<b>800V</b>
$I_F(AV)$	<b>35A</b>
$I_{FSM}$	<b>400A</b>
$V_F@175^{\circ}C$	<b>0.72V</b>
$I_R$	<b>1uA</b>
$T_J \text{ max.}$	<b>175^{\circ}C</b>
<b>Package</b>	<b>GBU-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	$V_{RRM}$	800	V
Maximum RMS Voltage	$V_{RMS}$	560	V
Maximum DC Blocking Voltage	$V_{DC}$	800	V
Maximum Average Forward Current	With heatsink	35	A
	Without heatsink	5.1	
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	@ $T_A = 25\text{ }^\circ\text{C}$	760	A
	@ $T_A = 125\text{ }^\circ\text{C}$	600	
$I^2 t$ rating for fusing ( $t = 8.3\text{ms}$ )	$I^2 t$	664	$A^2S$
Typical Junction Capacitance Measured at 1 MHZ And Applied $V_R = 4\text{ V}$	$C_J$	250	pF
Typical Thermal Resistance (Note 1) (with heatsink)	$R_{\theta JA}$	6	$^\circ\text{C/W}$
	$R_{\theta JL}$	3	
	$R_{\theta JC}$	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** ( $T_A = 25\text{ }^\circ\text{C}$  unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	$V_F$	$I_F = 17.5\text{ A}, T_J = 25\text{ }^\circ\text{C}$	-	0.88	0.92	V
		$I_F = 17.5\text{ A}, T_J = 125\text{ }^\circ\text{C}$	-	0.75	-	
Reverse Current	$I_R$	$V_R = 800\text{ V}, T_J = 25\text{ }^\circ\text{C}$	-	0.2	1	uA
		$V_R = 800\text{ V}, T_J = 125\text{ }^\circ\text{C}$	-	20	-	

NOTES :

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

TYPICAL CHARACTERISTIC CURVES

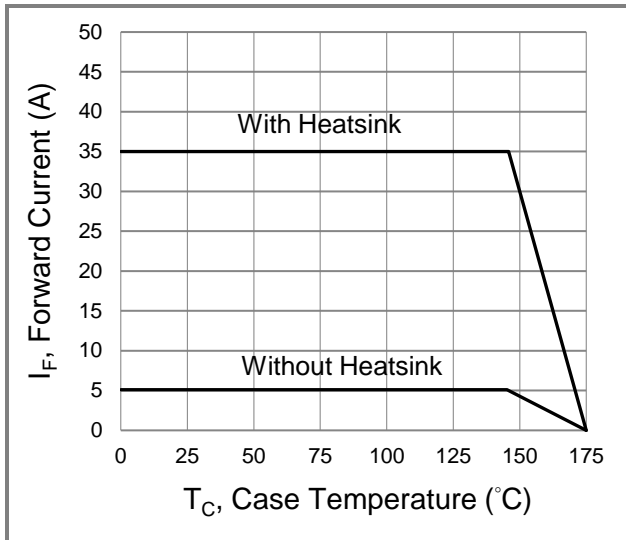


Fig.1 Forward Current Derating Curve

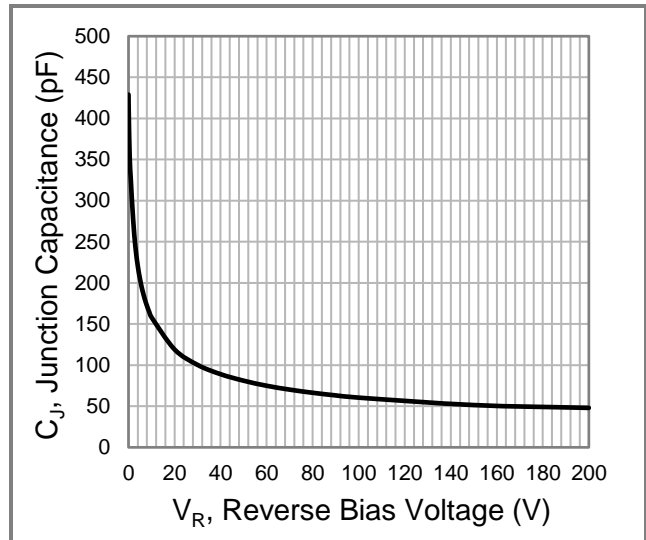


Fig.2 Typical Junction Capacitance

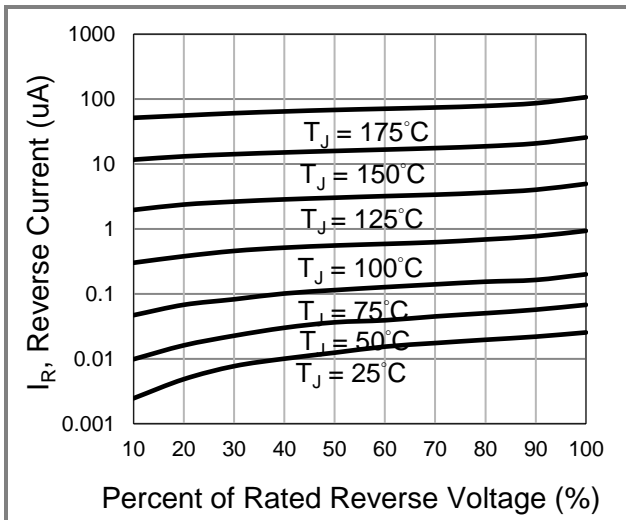


Fig.3 Typical Reverse Characteristics

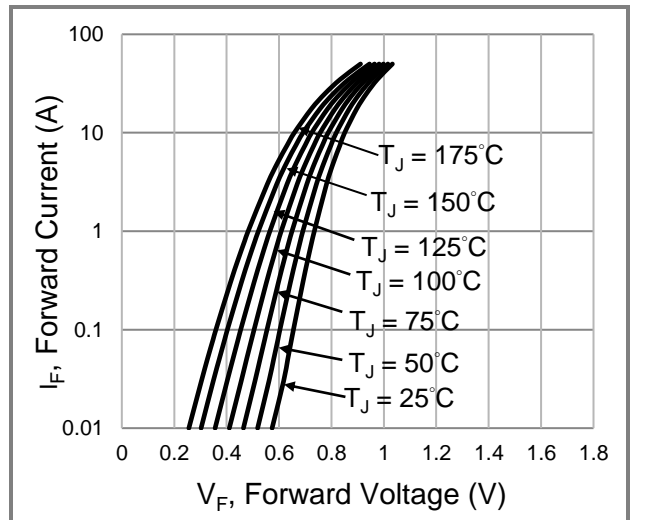
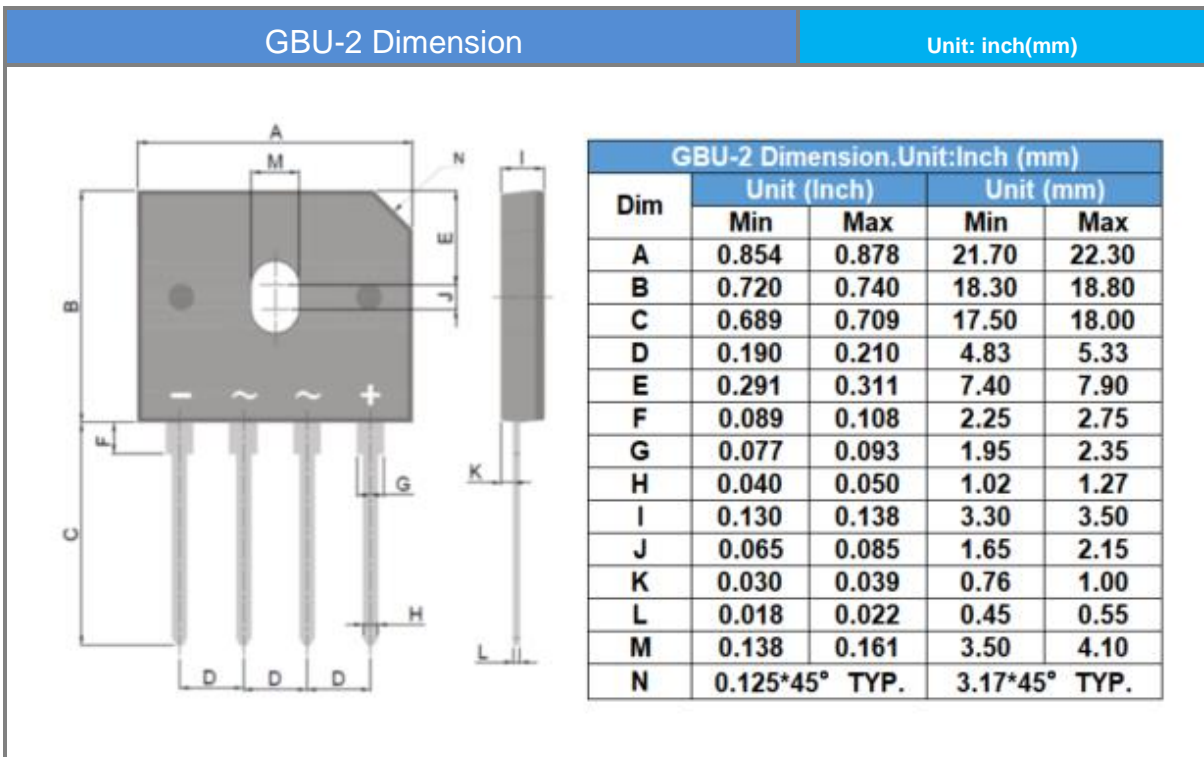


Fig.4 Typical Forward Characteristics

**Product and Packing Information**

Part No.	Package Type	Packing Type	Marking
GBU3508HULV	GBU-2	20 pcs / tube	GBU3508HULV

**Packaging Information**



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