



## GBU8G ~ GBU8M Series

### Glass Passivated Bridge Rectifiers

Voltage

400~1000 V

Current

8 A

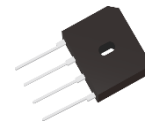
#### Features

- Glass passivated chip junction
- Low forward voltage drop
- Low leakage current
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

#### Mechanical Data

- Case : GBU Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.1489 ounces, 4.2216 grams

GBU



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

PARAMETER	SYMBOL	GBU8G	GBU8J	GBU8K	GBU8M	UNITS
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	400	600	800	1000	V
Maximum Average Forward Current	I <sub>F(AV)</sub>	8				A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	I <sub>FSM</sub>	180				A
Rating for fusing (t<8.3ms) <sup>(Note 1)</sup>	I <sup>2</sup> t	134.5				A <sup>2</sup> s
Typical Junction Capacitance Measured at 1 MHz And Applied V <sub>R</sub> = 4 V	C <sub>J</sub>	50				pF
Typical Thermal Resistance <sup>(Note 2)</sup>	R <sub>θJC</sub>	2.5				°C/W
	R <sub>θJA</sub>	33				
Operating Junction Temperature Range	T <sub>J</sub>	-55~150				°C
Storage Temperature Range	T <sub>STG</sub>	-55~150				°C



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

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	$V_F$	$I_F = 4\text{ A}, T_J = 25^\circ\text{C}$	-	-	1	V
		$I_F = 4\text{ A}, T_J = 125^\circ\text{C}$	-	0.82	-	
		$I_F = 8\text{ A}, T_J = 25^\circ\text{C}$	-	-	1.1	
		$I_F = 8\text{ A}, T_J = 125^\circ\text{C}$	-	0.9	-	
Reverse Current	$I_R$	$V_R = V_{RRM}, T_J = 25^\circ\text{C}$	-	-	5	uA
		$V_R = V_{RRM}, T_J = 125^\circ\text{C}$	-	-	500	

NOTES :

- $I^2t = 1/2 I_{FSM}^2 t$  (Suitable for half sine wave)
- Device mounted on 10cm\*9cm\*2.6cm aluminum Plate Heatsink



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## TYPICAL CHARACTERISTIC CURVES

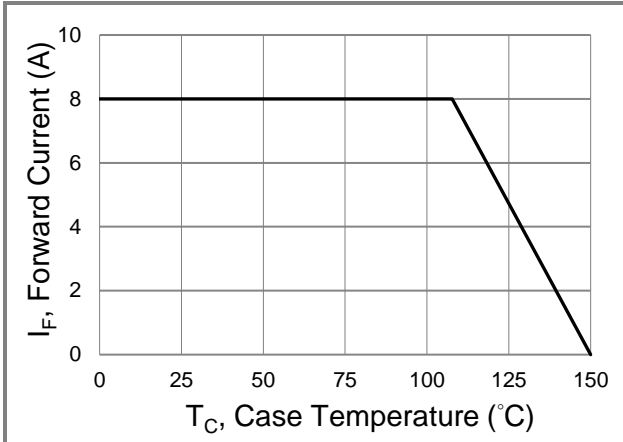


Fig.1 Forward Current Derating Curve

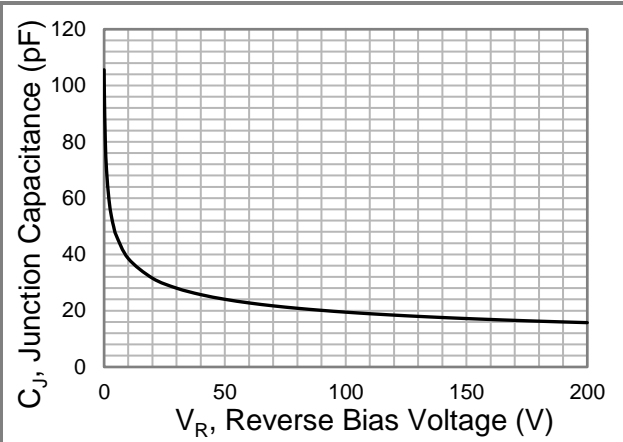


Fig.2 Typical Junction Capacitance

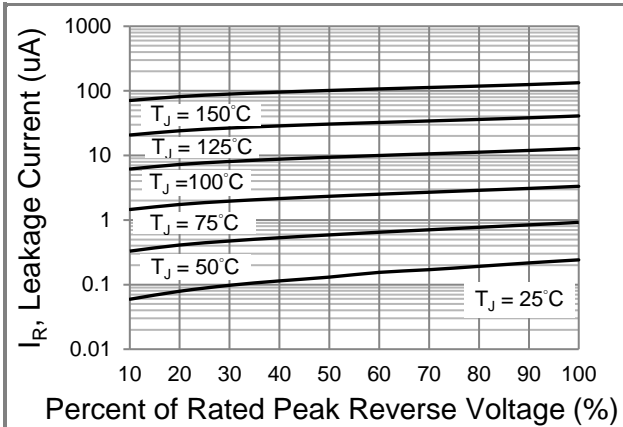


Fig.3 Typical Reverse Characteristics

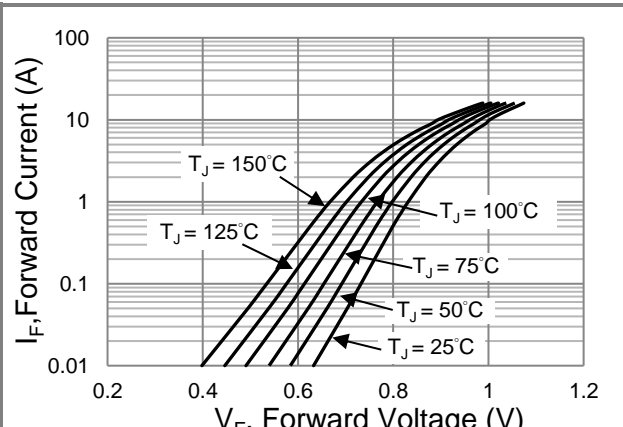


Fig.4 Typical Forward Characteristics

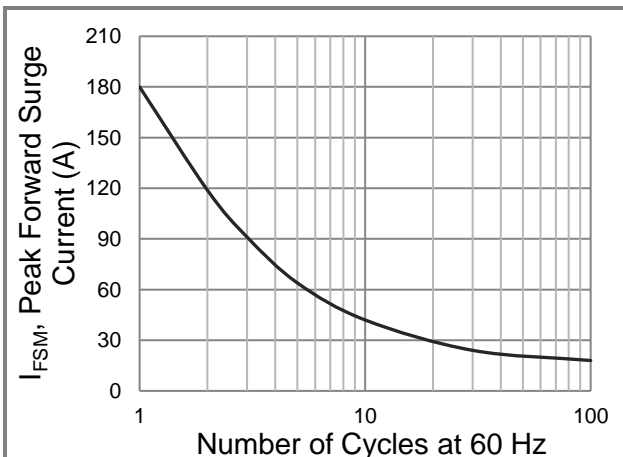


Fig.5 Maximum Forward Surge Current



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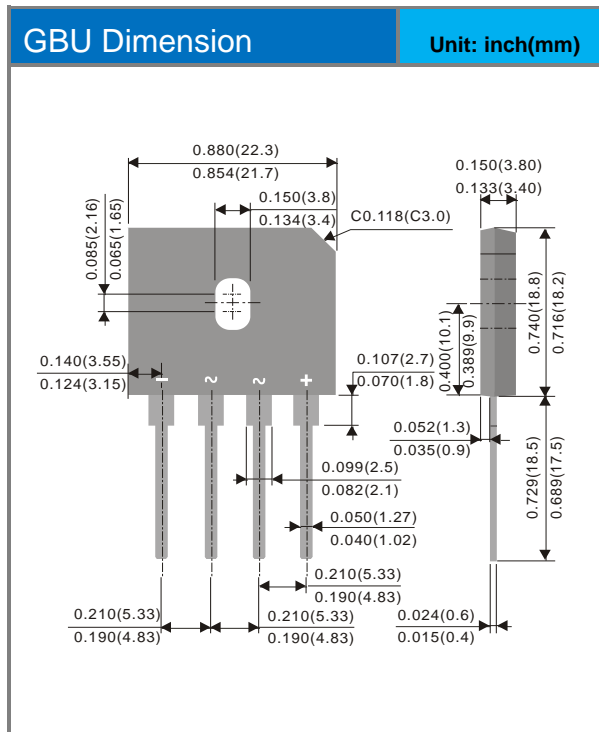
### Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
GBU8G_B0_00101	GBU	250 pcs / Box	GBU8G	Halogen free RoHS compliant
GBU8G_T0_00101	GBU	20pcs / Tube	GBU8G	Halogen free RoHS compliant
GBU8J_B0_00101	GBU	250 pcs / Box	GBU8J	Halogen free RoHS compliant
GBU8J_T0_00101	GBU	20pcs / Tube	GBU8J	Halogen free RoHS compliant
GBU8K_B0_00101	GBU	250 pcs / Box	GBU8K	Halogen free RoHS compliant
GBU8K_T0_00101	GBU	20pcs / Tube	GBU8K	Halogen free RoHS compliant
GBU8M_B0_00101	GBU	250 pcs / Box	GBU8M	Halogen free RoHS compliant
GBU8M_T0_00101	GBU	20pcs / Tube	GBU8M	Halogen free RoHS compliant
GBU8M_B0_001A2	GBU	250 pcs / Box	GBU8M	Halogen free RoHS compliant
GBU8M_T0_001A2	GBU	20pcs / Tube	GBU8M	Halogen free RoHS compliant



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## Packaging Information





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