

GBU8005~GBU810

Rev.B May.-2025

/ Descriptions

8.0A 50~1000V GBU

8.0A Single-Phase Silicon Bridge Rectifier, Reverse Voltage:50~1000V,GBU package.

/ Features

PCB

UL

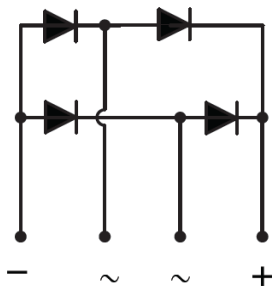
94V-0

Ideal for printed circuit board, Case material molded plastic, The plastic material has U/L flammability classification 94V-0, HF Product.

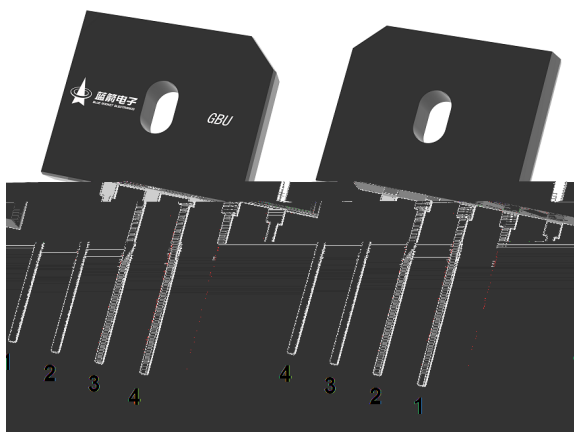
/ Applications

General purpose.

/ Equivalent Circuit



/ Pinning



PIN1 DC- PIN2 AC PIN3 AC PIN4 DC+

/ Marking

See Marking Instructions.

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Parameter	Symbol	Rating							Unit
		GBU 8005	GBU 801	GBU 802	GBU 804	GBU 806	GBU 808	GBU 810	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at $T_C=100^\circ\text{C}$ (with heatsink)	$I_{F(AV)}$	8.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	175							A
Rating for fusing ($t < 8.3\text{ms}$)	I^2t	127							A^2s

/ Electrical Characteristic Curve

Fig. 1 Derating Curve for Output Rectified Current

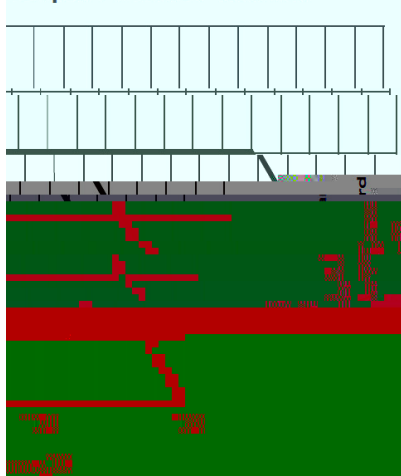


Fig. 2 Maximum Non-repetitive Peak

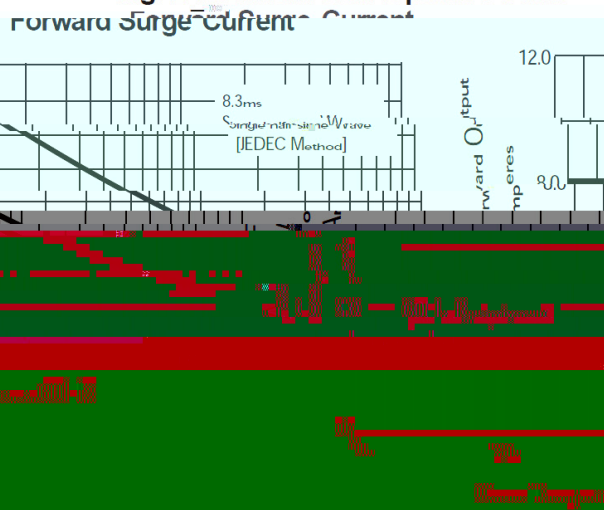


Fig. 3 Typical Instantaneous Forward Characteristics

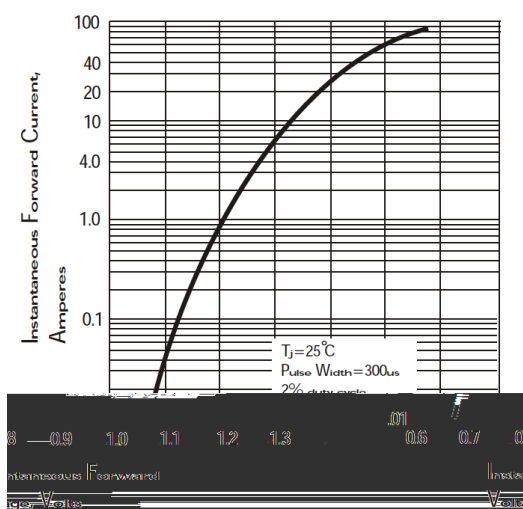


Fig. 4 Typical Reverse Characteristics

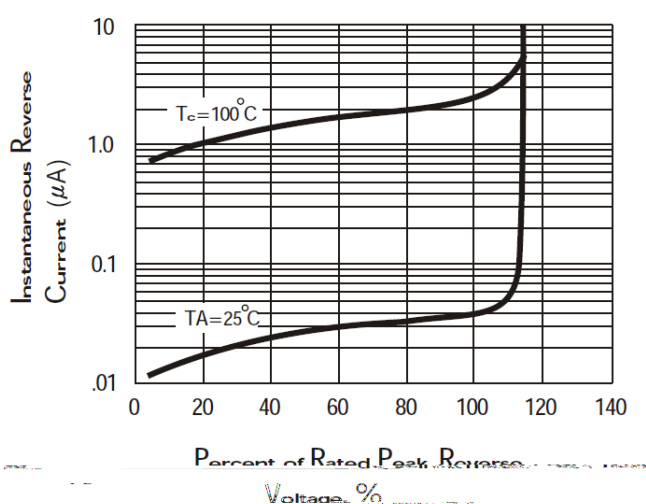
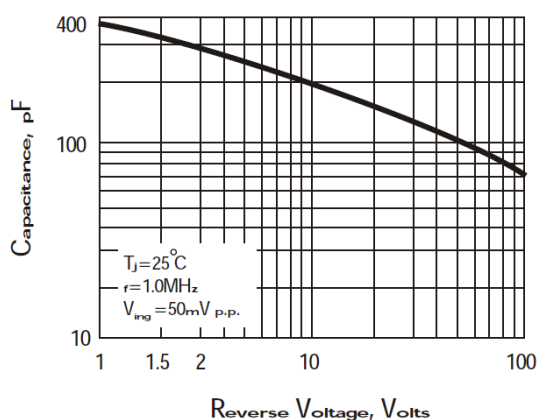
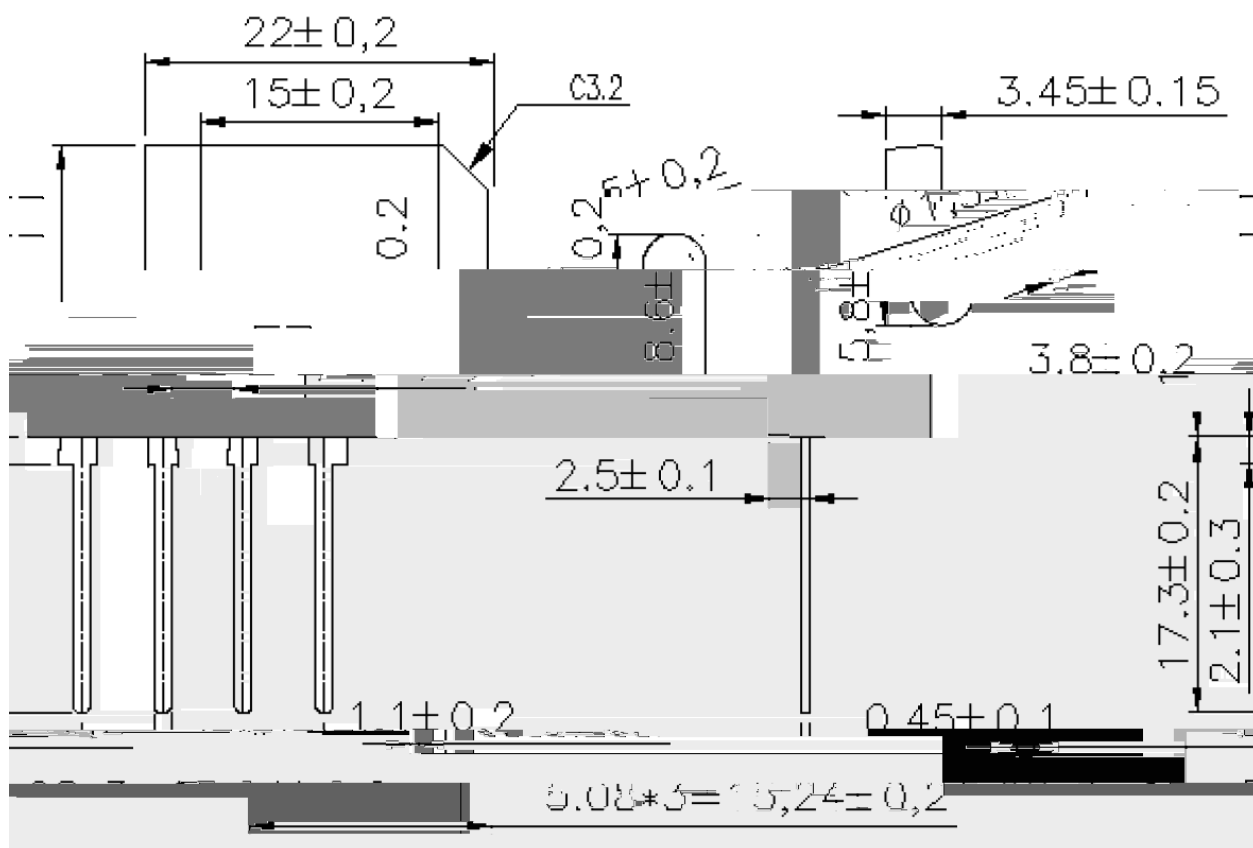


Fig. 5 Typical Junction Capacitance





/ Package Dimensions



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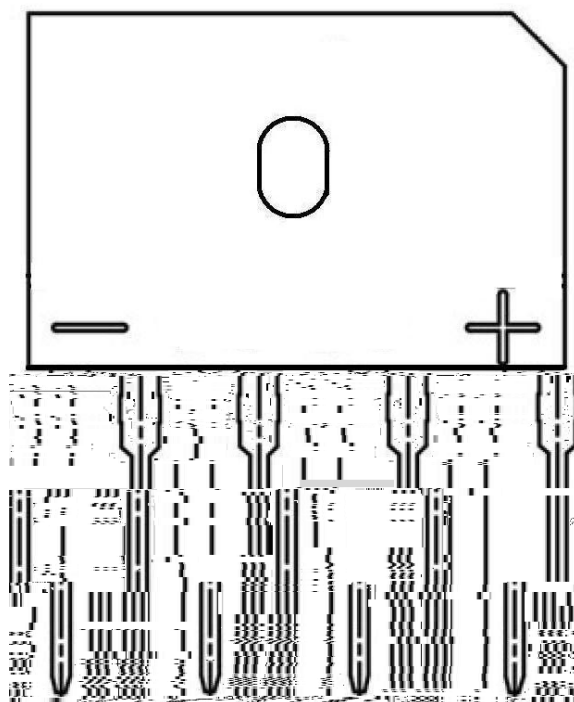
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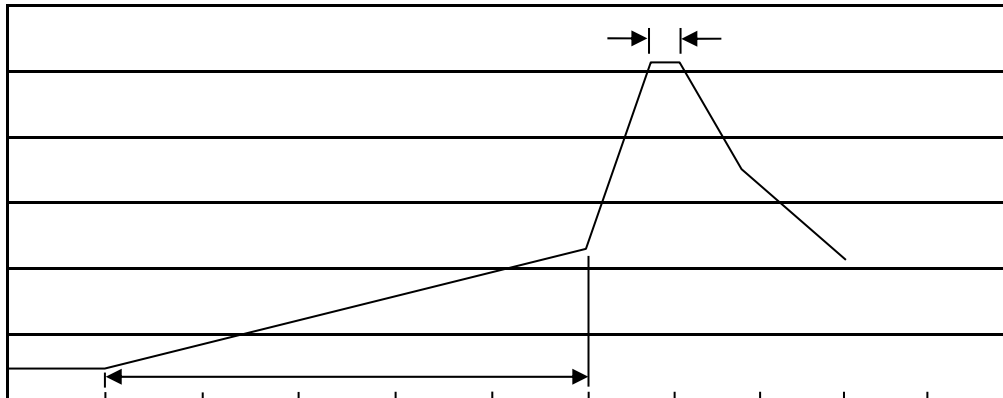
蓝箭电子
BLUE ROCKET ELECTRONICS

DATA SHEET

/ Marking Instructions



() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

1 25 150 60 90sec;

1.Preheating:25~150 , Time:60~90sec.

2 255±5 5±0.5sec;

2.Peak Temp.:255±5 , Duration:5±0.5sec.

3 2 10 /sec.

3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

270±5

10±1 sec.

Temp.:270±5

Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type	Units					Dimension (unit mm ³)		
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
GBU	-	-	250	10	2500	-	-	-

/ Notices