

# GBU10005~GBU1010

Rev.A.Aug.-2019

## / Descriptions

50~1000V 10.0A GBU

Glass Passivated Bridge Rectifiers, Reverse Voltage:50~1000V,Forward Current:10.0A,GBU package.

## / Features

PCB

UL

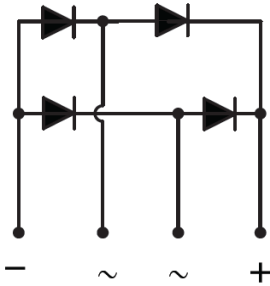
94V-0

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

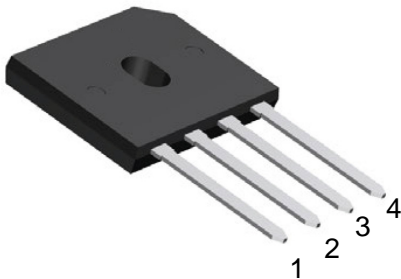
## / Applications

General purpose.

## / Equivalent Circuit



## / Pinning



PIN1 DC- PIN2 AC PIN3 AC PIN4 DC+

## / h<sub>FE</sub> Classifications & Marking

See Marking Instructions

**/ Absolute Maximum Ratings(Ta=25 )**

Parameter	Symbol	Rating							Unit
		GBU 10005	GBU 1001	GBU 1002	GBU 1004	GBU 1006	GBU 1008	GBU 1010	
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 Current(with heatsink Note 2)	$I_{F(AV)}$	10.0							A
Maximum Average Forward Rectified Current @ $T_C=100$ (without heatsink)		3.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	$I_{FSM}$	220							A
$I^2t$ Rating for Fusing ( $t<8.3ms$ )	$I^2t$	200							A <sup>2</sup> s
Typical Junction Capacitance Per Element (Note1)	CJ	86							pF
Typical Thermal Resistance (Note2)	$R_{\theta Jc}$	2.0							/W
Operating Temperature Range	$T_j$	-55 to +150							
Storage Temperature Range	$T_{stg}$	-55 to +150							

NOTE:

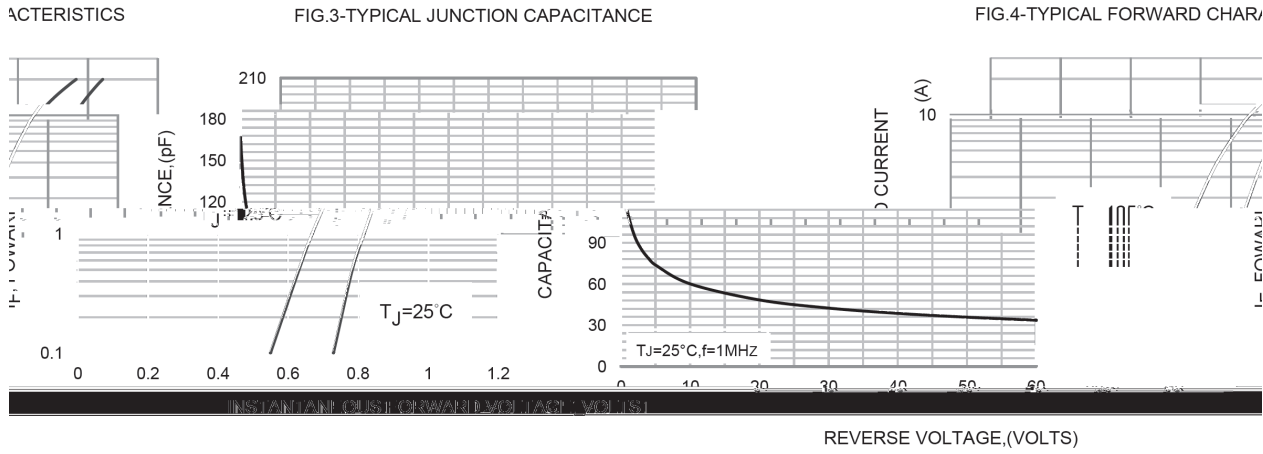
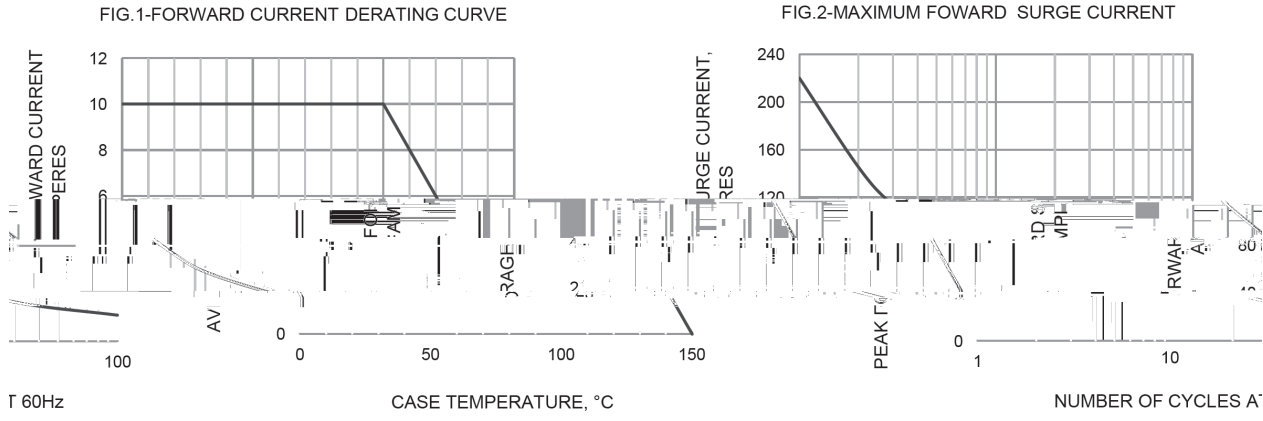
1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2.Device mounted on 150mm\*150mm\*1.6mm Cu Plate Heatsink.

**/ Electrical Characteristics(Ta=25 )**

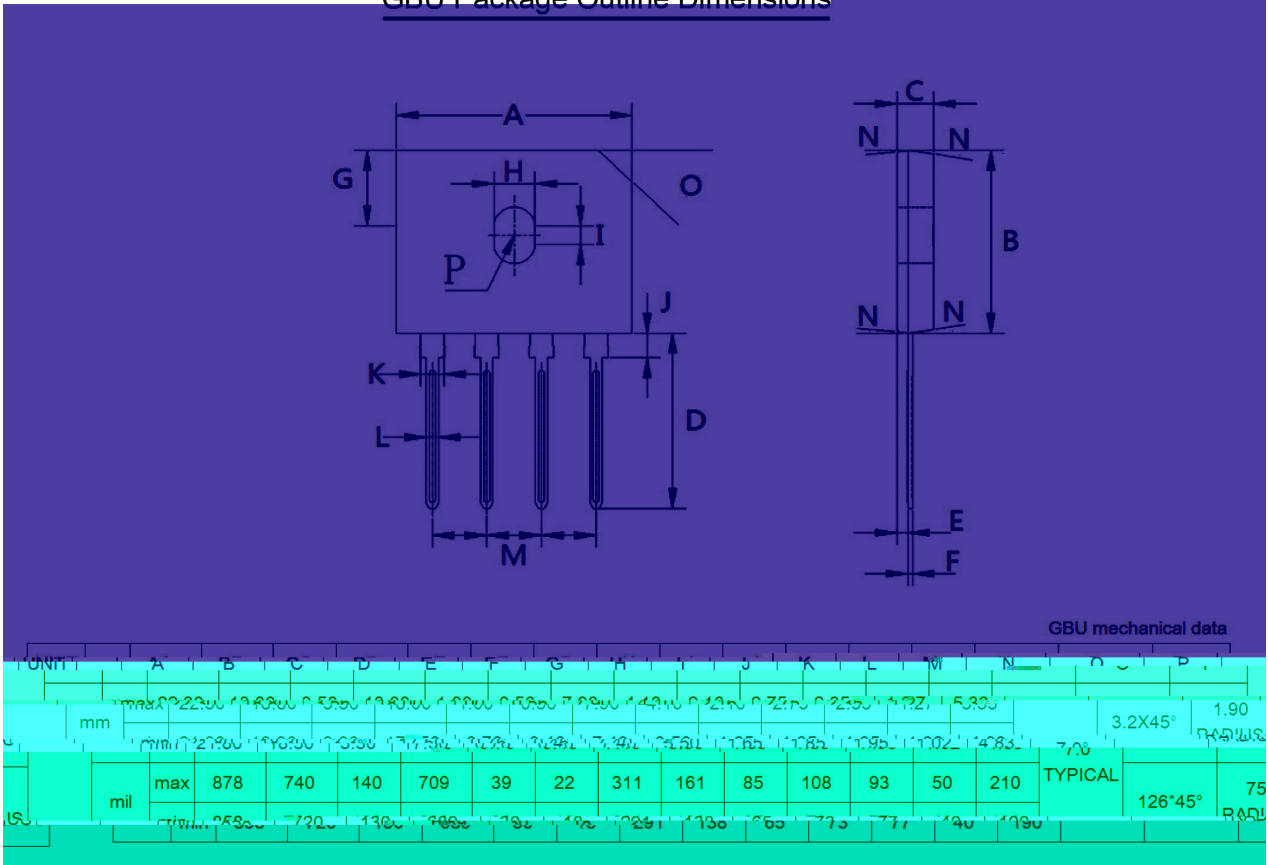
Parameter	Symbol	Test Conditions	Rating	Unit
Maximum Forward Voltage	$V_F$	$I_F=5.0A$	1.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_a=25$	5.0	$\mu A$
		$T_a=125$	500	

/ Electrical Characteristic Curve

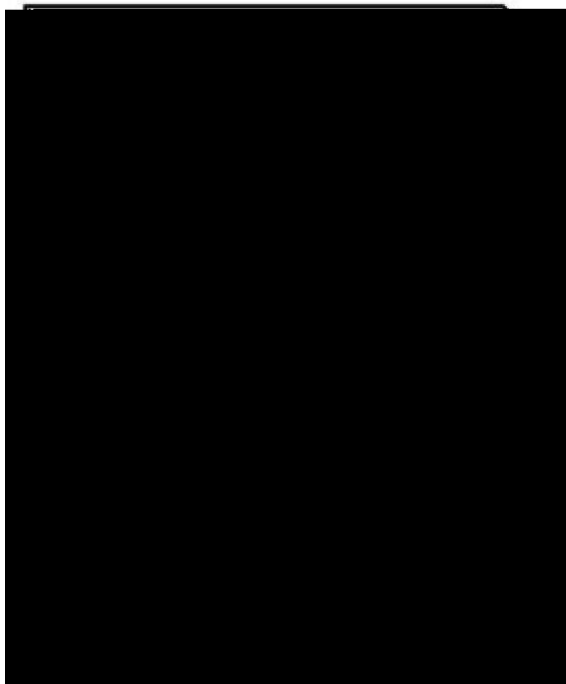


**/ Package Dimensions**

GBU Package Outline Dimensions



**/ Marking Instructions**



GBU10005

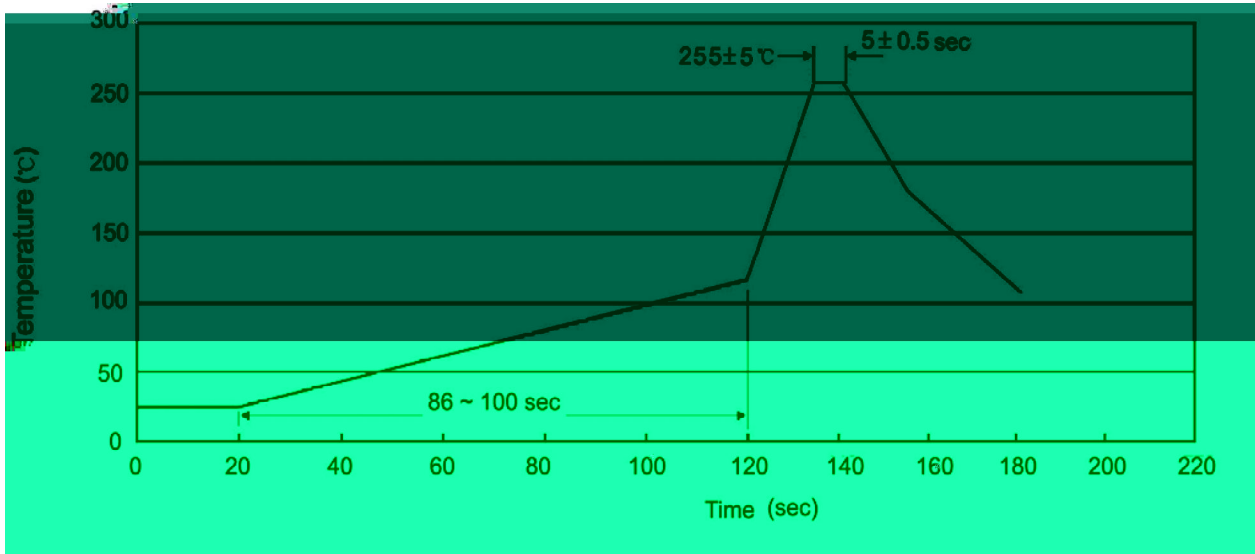
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Note:

GBU10005: Product Type.

\*\*\*\*: Lot No. Code, code change with Lot No.

( ) / 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 cm <sup>3</sup> )
						x	x	x x

/ Notices