

/ Descriptions

50~1000V 10.0A GBU

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

/ Features

PCB

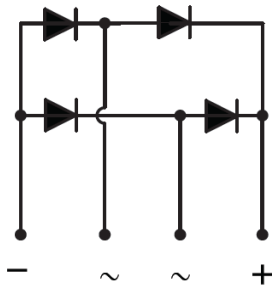
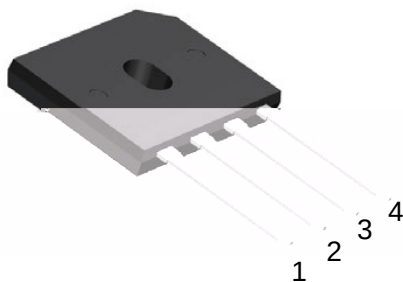
UL

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 PIN 3 AC PIN 4 DC+

/ h_{FE} 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 ² t Rating for Fusing (t<8.3ms)	I^2t	200							A ² s
Typical Junction Capacitance Per Element (Note1)	CJ	86							pF
Typical Thermal Resistance (Note2)	R _{θJc}	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.

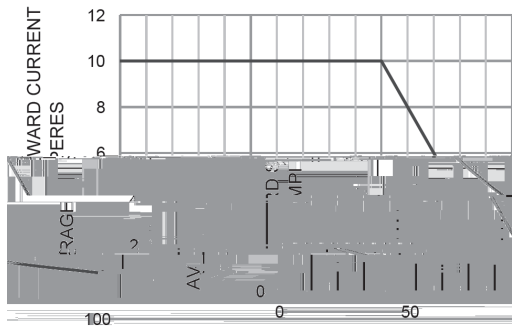
2.Device mounted on 150mm*150mm*1.6mm Cu Plate Heatsink.

/ 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	μA
		T _a =125	500	

Electrical Characteristic Curve

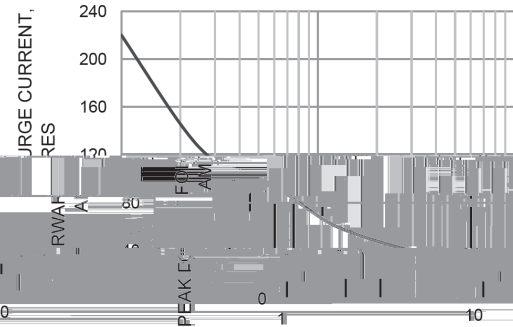
FIG.1-FORWARD CURRENT DERATING CURVE



30Hz

CASE TEMPERATURE, °C

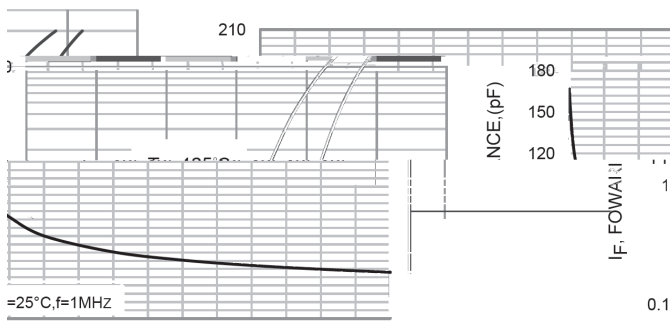
FIG.2-MAXIMUM FORWARD SURGE CURRENT



NUMBER OF CYCLES AT 60Hz

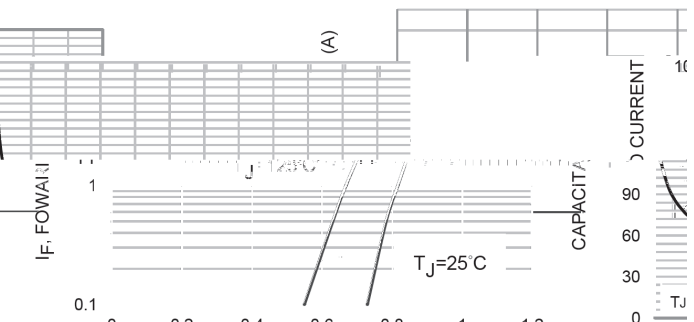
CHARACTERISTICS

FIG.3-TYPICAL JUNCTION CAPACITANCE



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

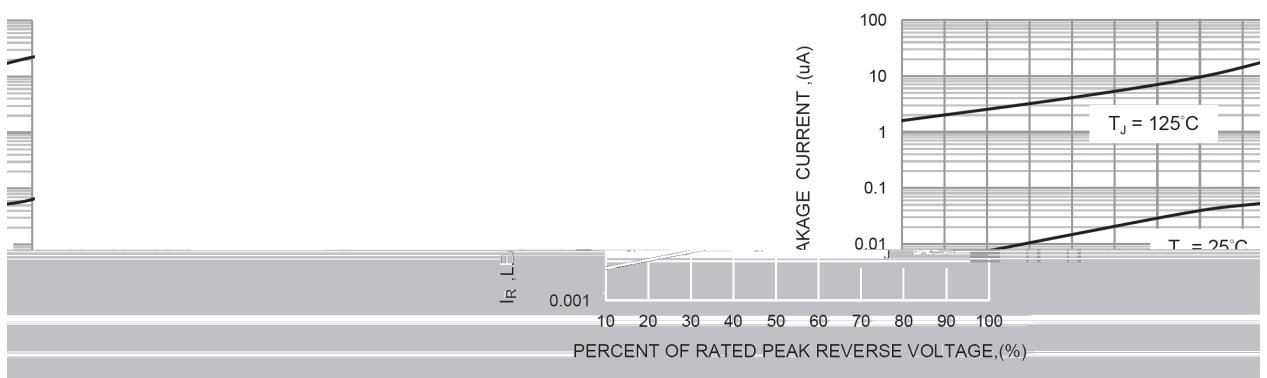
FIG.4-TYPICAL FORWARD CHARACTERISTICS



REVERSE VOLTAGE,(VOLTS)

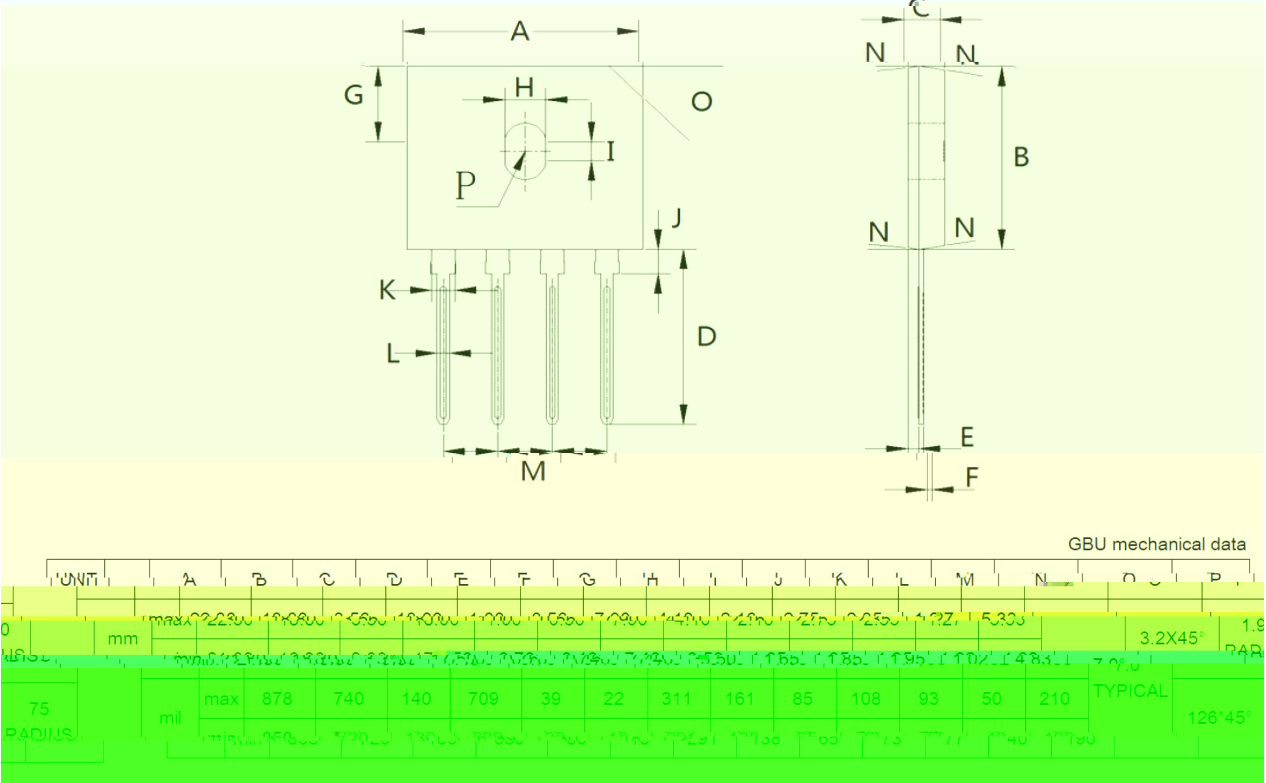
CHARACTERISTICS

FIG.5-TYPICAL REVERSE CHARACTERISTICS

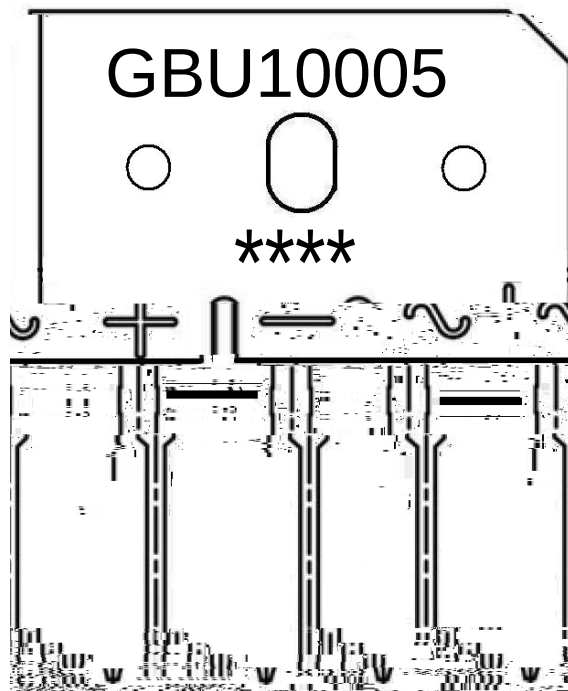


/ Package Dimensions

GBU Package Outline Dimensions



/ Marking Instructions



GBU10005

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 ³)		
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
GBU	-	-	350	10	3500	-	314×106×39	330×242×237

/ Notices