

/ Descriptions

50~1000V 15.0A GBU

Glass Passivated Bridge Rectifiers, Reverse Voltage:50~1000V,Forward Current:15.0A,GBU package.

/ Features

PCB

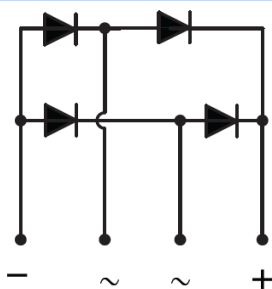
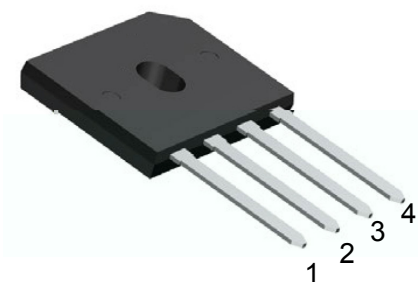
UL

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_{FE} Classifications & Marking

See Marking Instructions

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating							Unit
		GBU 15005	GBU 1501	GBU 1502	GBU 1504	GBU 1506	GBU 1508	GBU 1510	
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)	$I_{F(AV)}$	15							A
Maximum Average Forward Rectified Current @T _C =100°C(without heatsink)		3.2							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)	$R_{\theta Jc}$	2.0							°C/W
Operating Temperature Range	T _j	-55 to +150							°C
Storage Temperature Range	T _{stg}	-55 to +150							°C

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	$I_F=7.5A$	1.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	T _a =25°C	5.0	μA
		T _a =125°C	500	

/ Electrical Characteristic Curve

FIG.1-FORWARD CURRENT DERATING CURVE

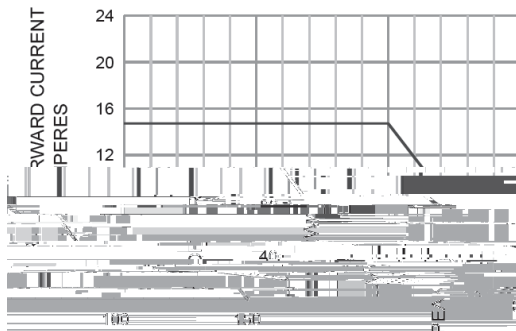
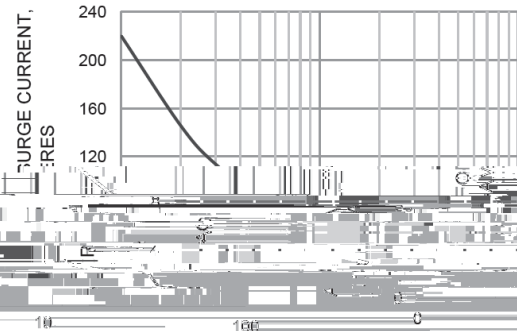


FIG.2-MAXIMUM FOWARD SURGE CURRENT



TEMPERATURE, °C NUMBER OF CYCLES AT 60Hz CASE T

FORWARD CHARACTERISTICS

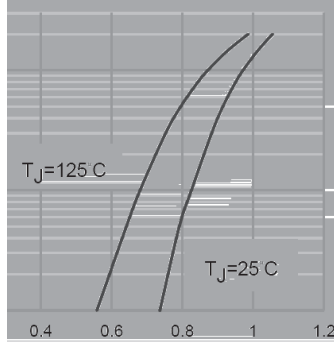


FIG.3-TYPICAL JUNCTION CAPACITANCE

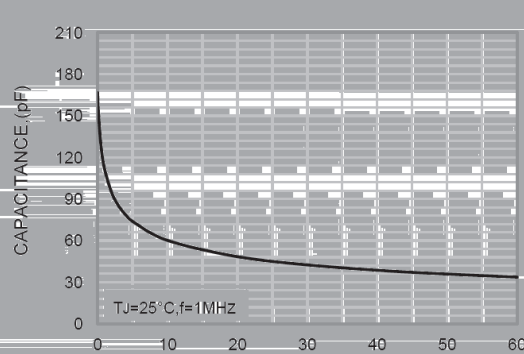
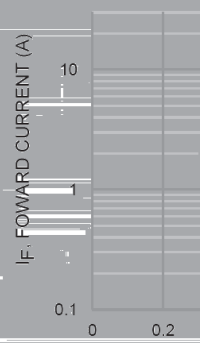


FIG.4-TYPICAL

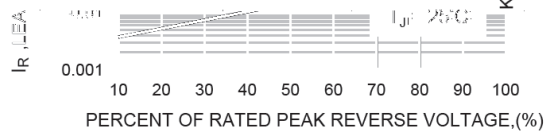
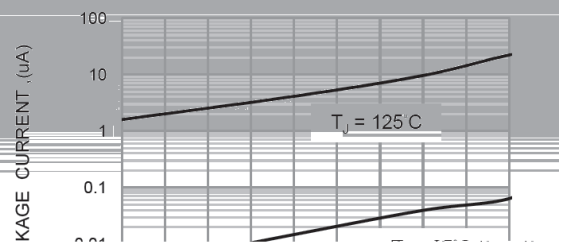


NEOUS FORWARD VOLTAGE, VOLTS

REVERSE VOLTAGE, (VOLTS)

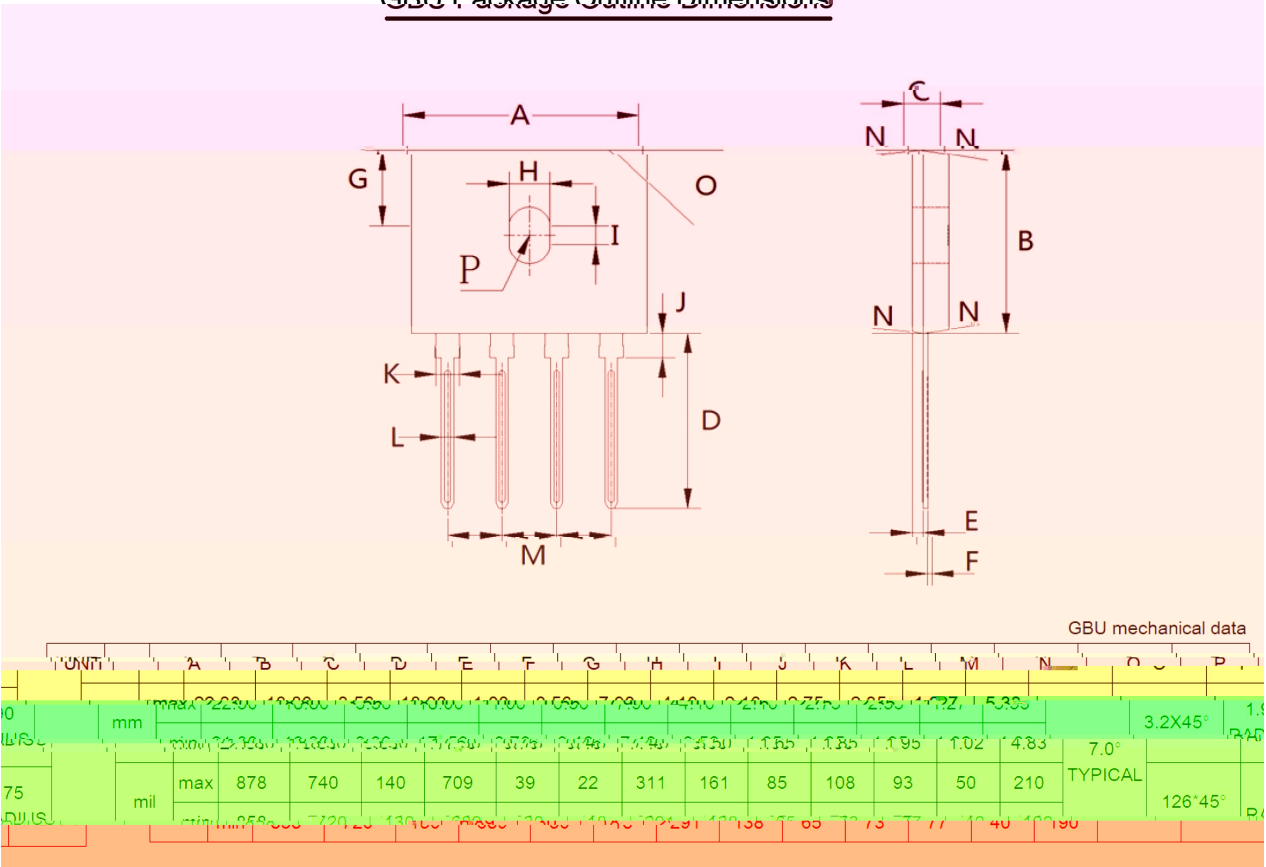
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FIG.5-TYPICAL REVERSE CHARACTERISTICS

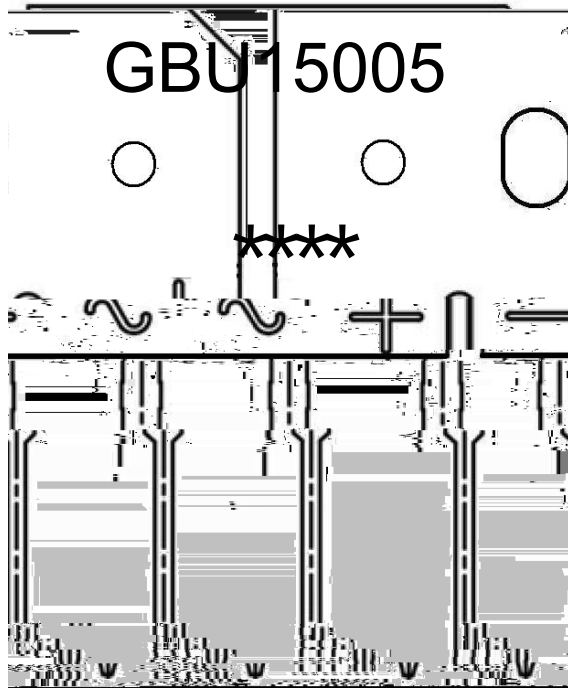


/ Package Dimensions

GBU Package Outline Dimensions



/ Marking Instructions



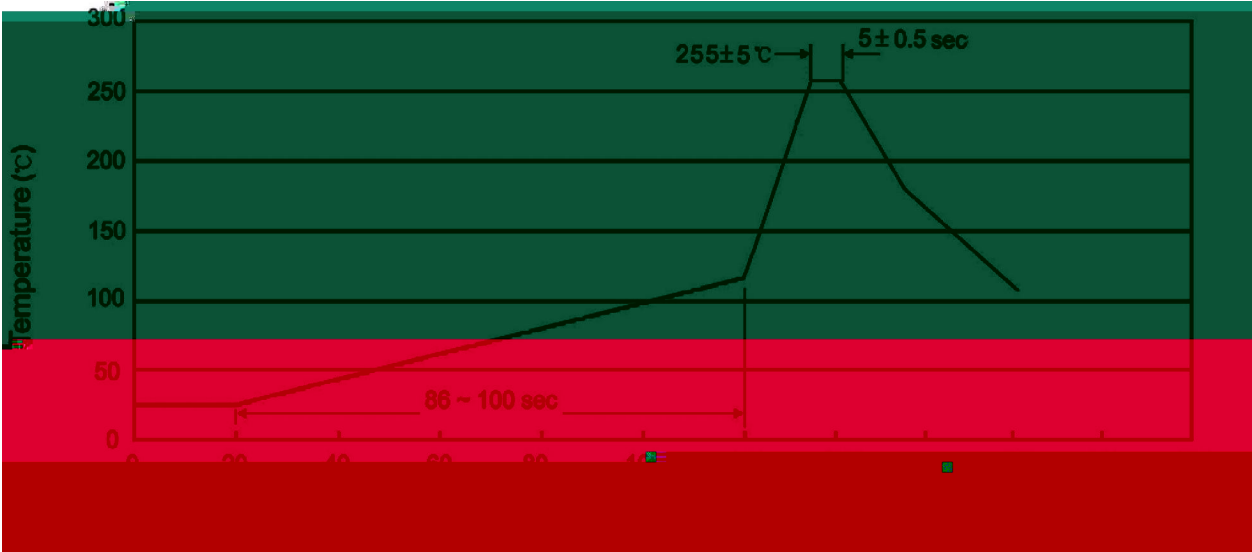
GBU15005

Note:

GBU15005: 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 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: cm³)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
GBU	-	-	350	10	3500	-	314×106×39	330×242×237

/ Notices