

/ Descriptions

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

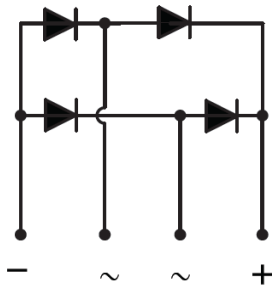
/ Features

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.

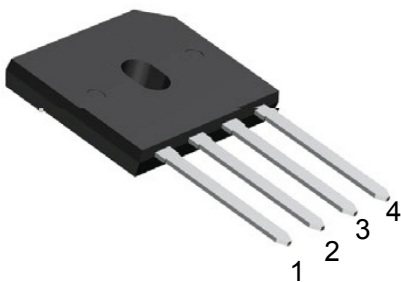
/ Applications

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)	C_J	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	$T_a=25^{\circ}C$	5.0	μA
		$T_a=125^{\circ}C$	500	

/ Electrical Characteristic Curve

FIG.1-FORWARD CURRENT DERATING CURVE

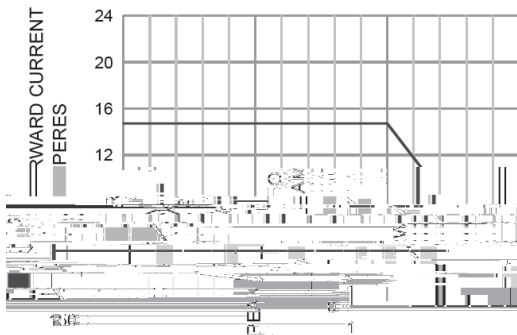


FIG.2-MAXIMUM FORWARD SURGE CURRENT

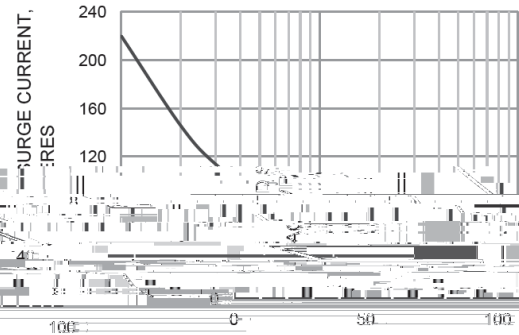


FIG.3-TYPICAL JUNCTION CAPACITANCE

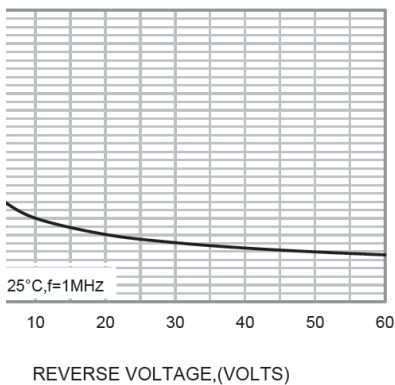


FIG.4-TYPICAL FORWARD CHARACTERISTICS

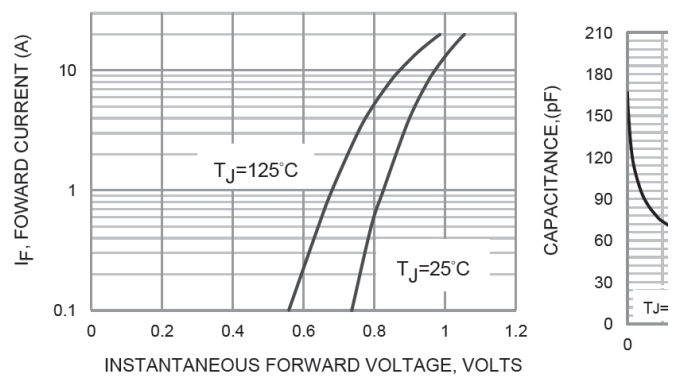
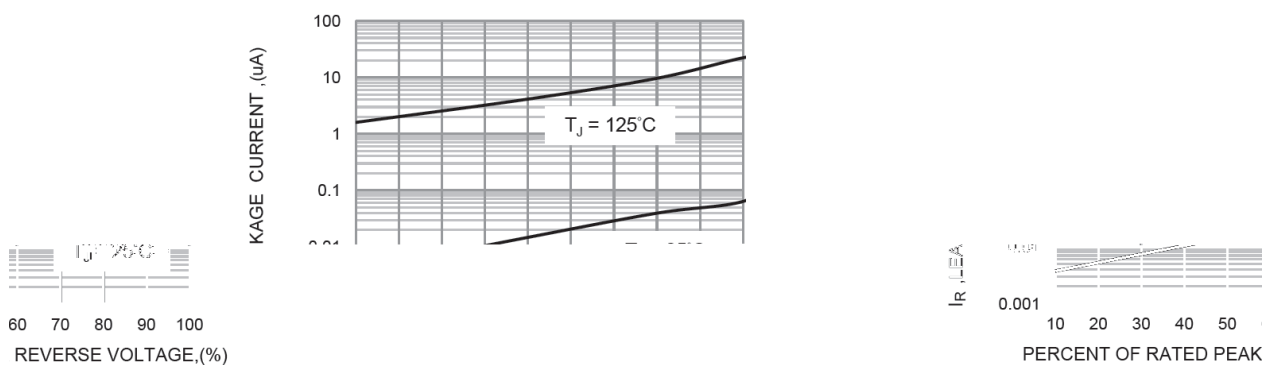
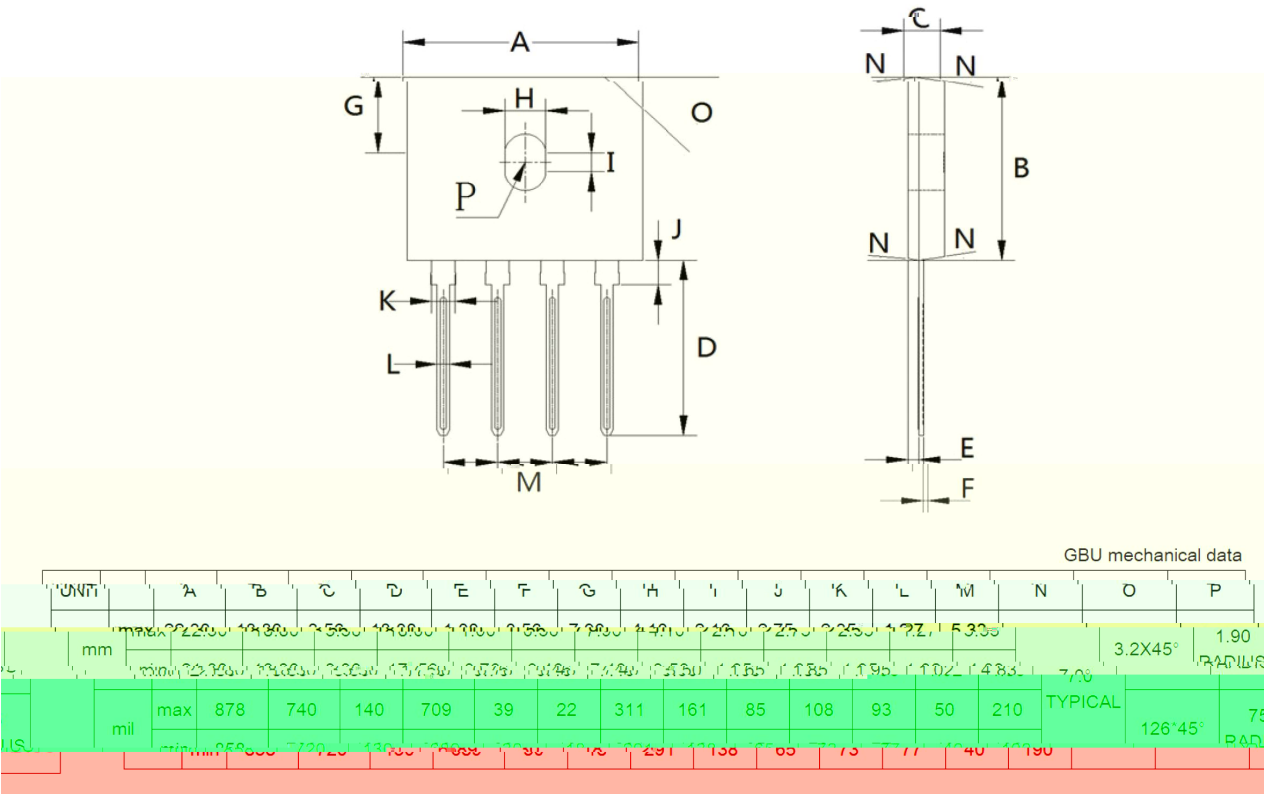


FIG.5-TYPICAL REVERSE CHARACTERISTICS

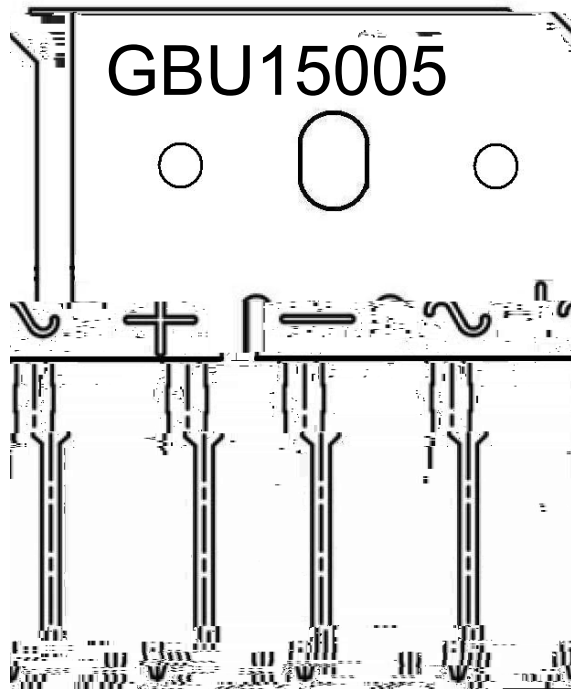


/ Package Dimensions

GBU Package Outline Dimensions



/ Marking Instructions



GBU15005

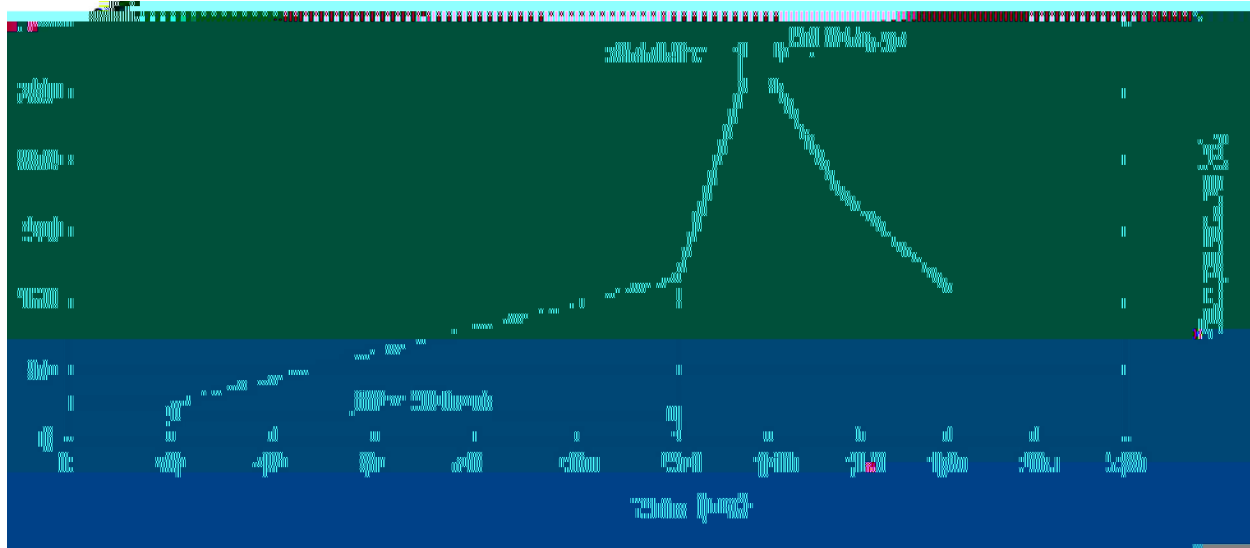
Note:

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
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/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: cm ³)		
	只袋	袋盒	只盒	盒箱	只箱	袋	盒	箱
							x x	x x

/ Notices