

GBJ25005G~GBJ2510G

Rev.A .Jul.-2018



DATA SHEET

/ Descriptions

50~1000V

25A GBJ

Glass Passivated Bridge Rectifiers, Reverse Voltage:50~1000V,Forward Current:25A,GBJ package.

/ Features

PCB

UL

94V-0

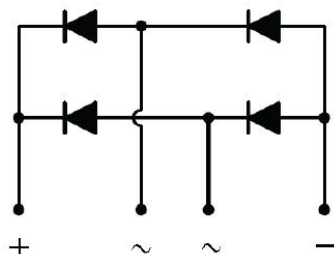
Ideal for printed circuit board, Case material molded plastic, The plastic material has U/L flammability classification 94V-0. Halogen free product.

/ Applications

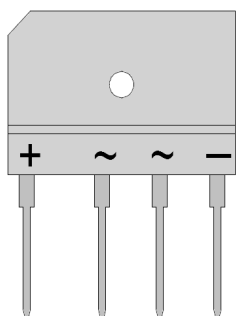
一般用途.

General purpose.

/ Equivalent Circuit



/ Pinning



1 2 3 4

PIN1 DC+ PIN2 AC PIN 3 AC PIN 4 DC-

/ h_{FE} Classifications & Marking

See Marking Instructions



Parameter	Symbol	Rating							Unit
		GBJ 25005G	GBJ 2501G	GBJ 2502G	GBJ 2504G	GBJ 2506G	GBJ 2508G	GBJ 2510G	
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)	$I_{F(AV)}$	25							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	300							A
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	374							A ² s
Typical Junction Capacitance Per Element (Note1)	CJ	94							pF
Typical Thermal Resistance (Note2)	$R_{\theta Jc}$	1.1							°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.

Parameter	Symbol	Test Conditions	Rating	Unit
Maximum Forward Voltage	V_F	$I_F=12.5A$	1.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_a=25^\circ C$	5.0	μA

/ Electrical Characteristic Curve

FIG.1-FORWARD CURRENT DERATING CURVE

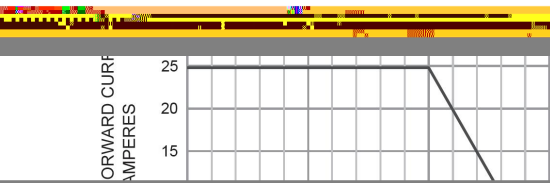
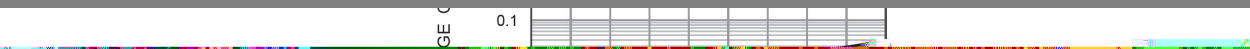
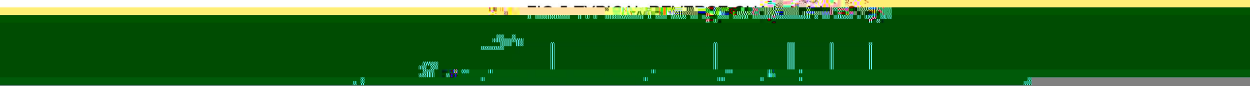
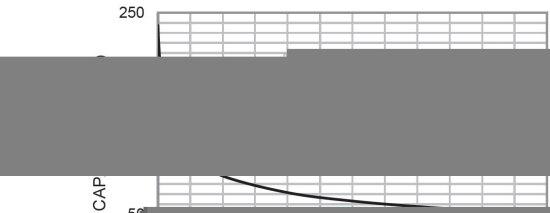
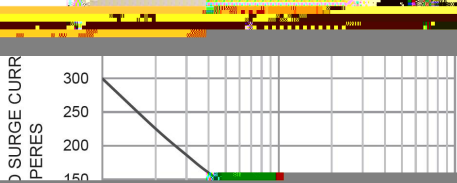
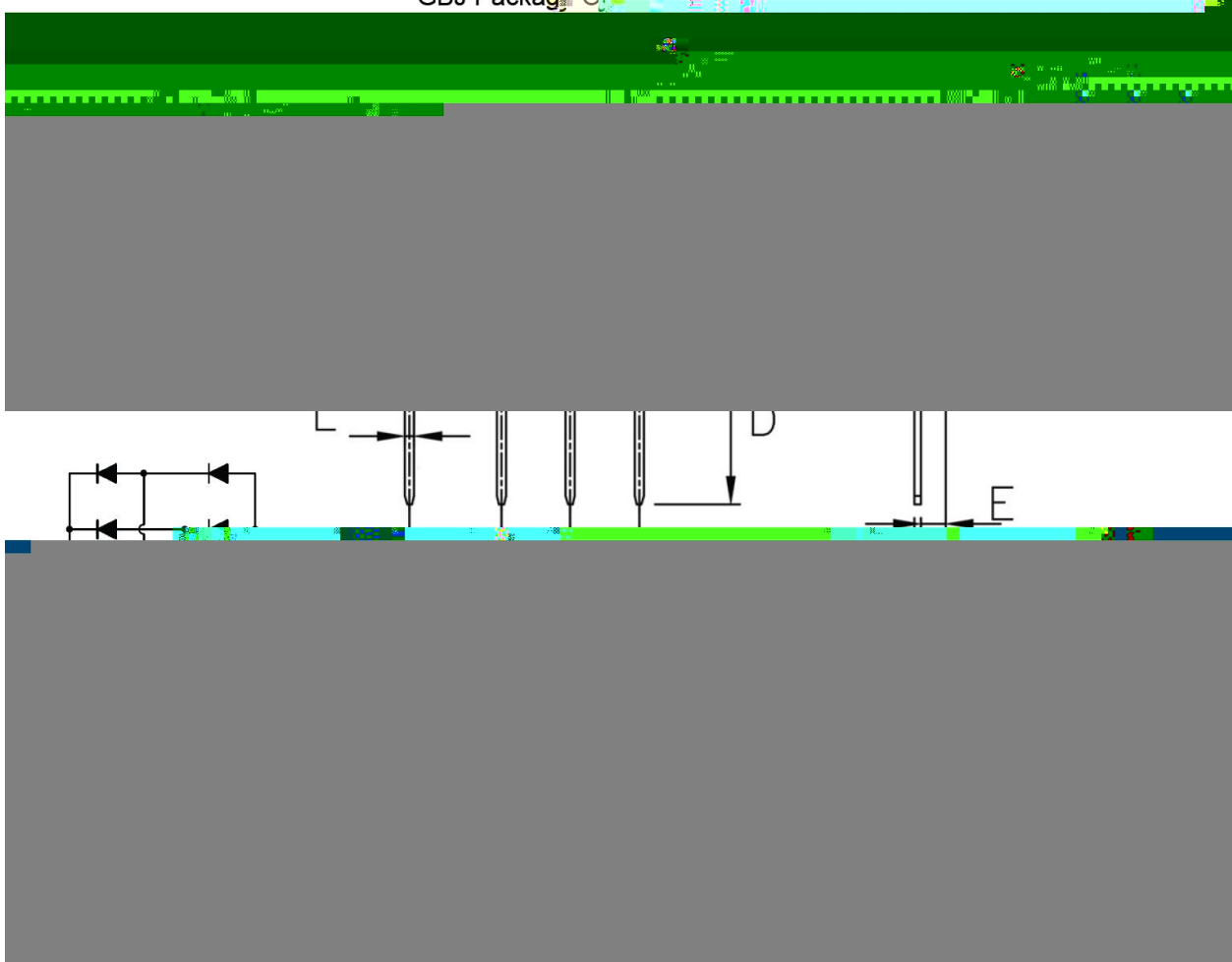


FIG.2-MAXIMUM FOWARD SURGE CURRENT

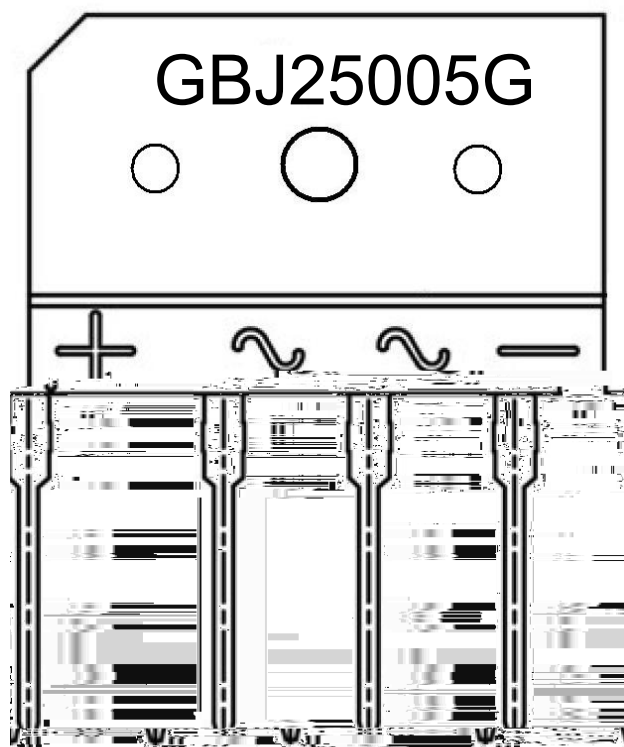


/ Package Dimensions

GBJ Package Outline Dimensions



/ Marking Instructions

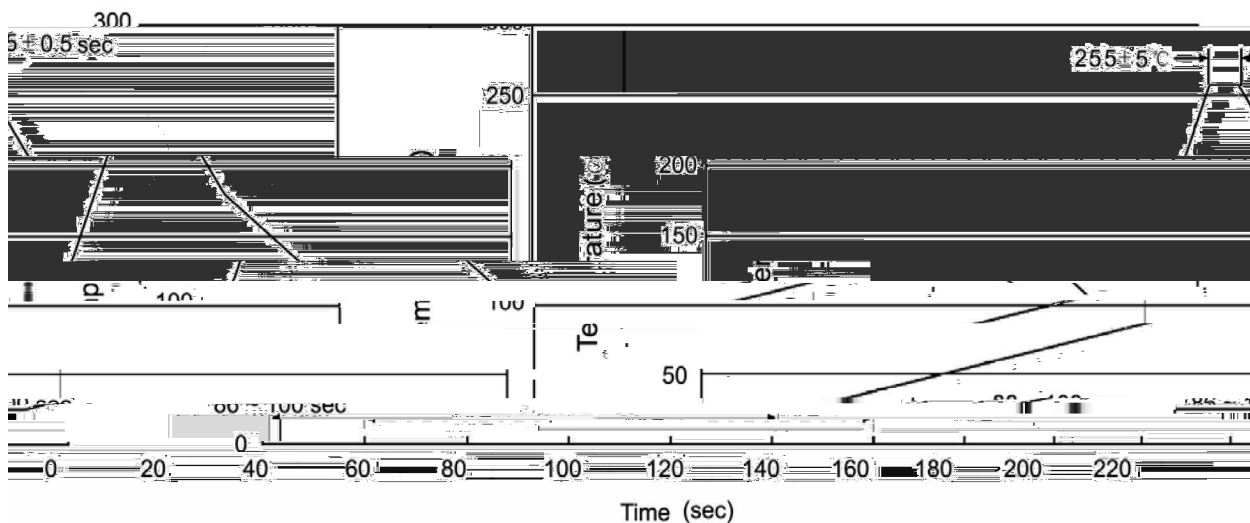


GBJ25005G

Note:

GBJ25005G: 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: mm ³)		
	只袋	袋盒	只盒	盒箱	只箱	袋	盒	箱

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	只盒	盒箱	只箱	Tube 套管	盒	箱

/ Notices