

GBJ20005G~GBJ2010G

Rev.A .Jul.-2019



DATA SHEET

Glass Passivated Bridge Rectifiers, Reverse Voltage:50~1000V,Forward Current:20A,GBJ package.

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.

General purpose.



/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating							Unit
		GBJ 20005G	GBJ 20010G	GBJ 20020G	GBJ 20040G	GBJ 20060G	GBJ 20080G	GBJ 20100G	
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)}	20							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	270							A
I ² t Rating for Fusing (t<8.3ms)	I ² t	300							A ² s
Typical Junction Capacitance Per Element (Note1)	C _J	70							pF
Typical Thermal Resistance (Note2)	R _{Jc}	1.2							°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 =10A	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



FIG.2-MINIMUM FORWARD SURGE CURRENT



A

0

AK

0.1 0.3 0.5 0.7 0.9 1.1 1.3
INSTANTANEOUS FORWARD VOLTAGE, VOLTS

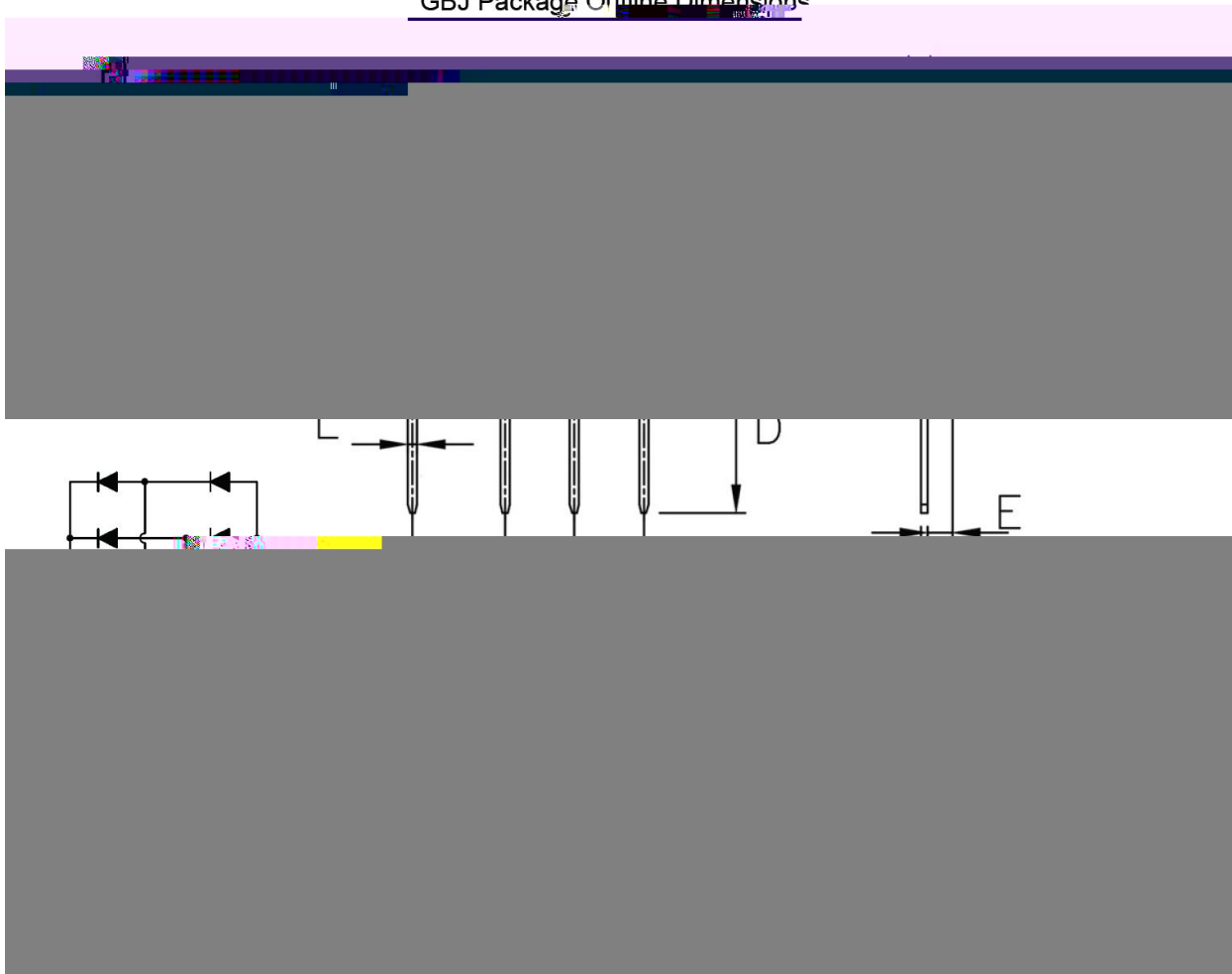
REVERSE VOLTAGE,(VOLTS)





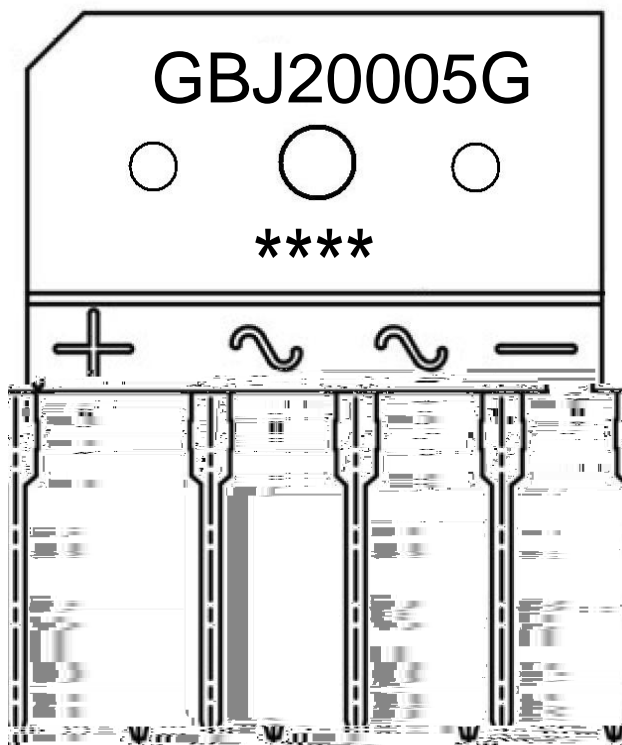
/ Package Dimensions

GBJ Package Outline Dimensions





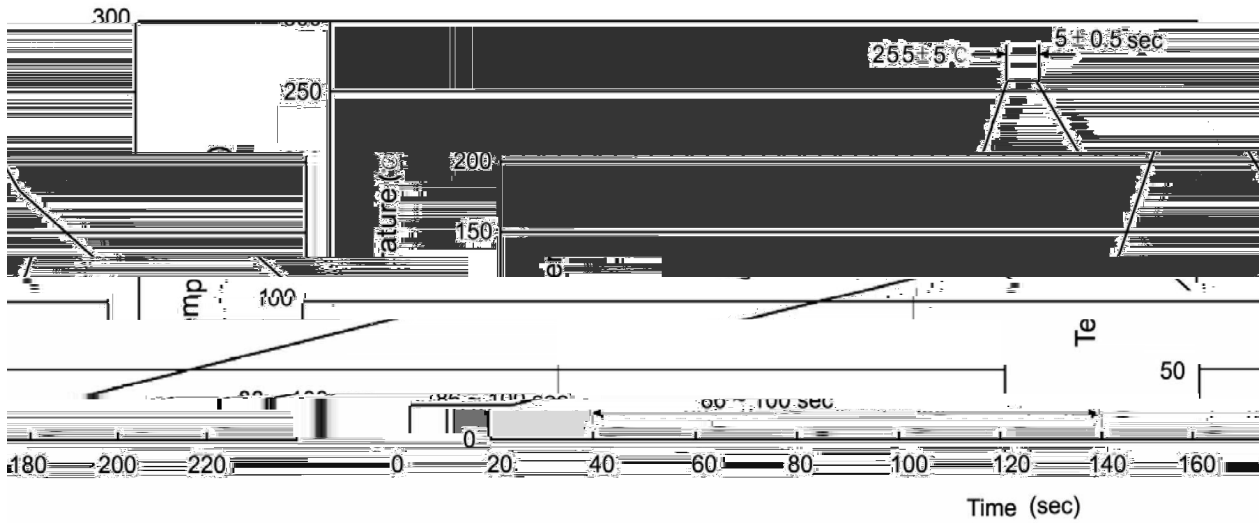
/ Marking Instructions



GBJ20005G: 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°C 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)		
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag 袋	Inner Box 盒	Outer Box 箱
GBJ	-	-						

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube 套管	Inner Box 盒	Outer Box 箱
GBJ	/	/	200	10	2000	/	306*108*42mm	322*246*252mm

/ Notices