GBJ25005~GBJ2510

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

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

/ Applications

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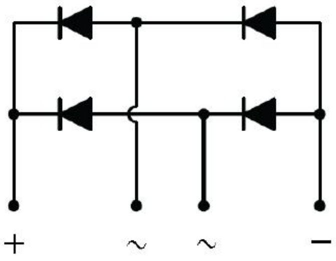
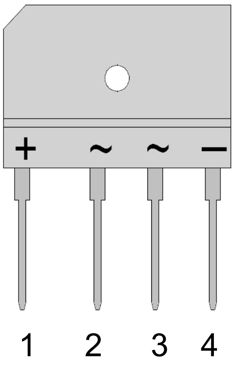
General purpose.

/ Equivalent Circuit



/ Pinning



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

/ h_{FE} Classifications & Marking

See Marking Instructions

Parameter	Symbol	Rating							Unit
		GBJ 25005	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	
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 Surage Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	270							A
I^2t Rating for Fusing (t<8.3ms)	I^2t	300							A^2s
Typical Junction Capacitance per element (Note1)	CJ	70							pF
Typical Thermal Resistance (Note2)	$R_{\theta Jc}$	1.5							℃/W
Operation 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.

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℃	5.0	μA

/ Electrical Characteristic Curve

FIG.1 FORWARD CURRENT DERA

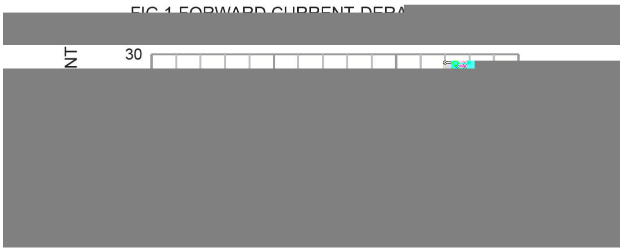


FIG.3-TYPICAL JUNCTION CAPACITANCE

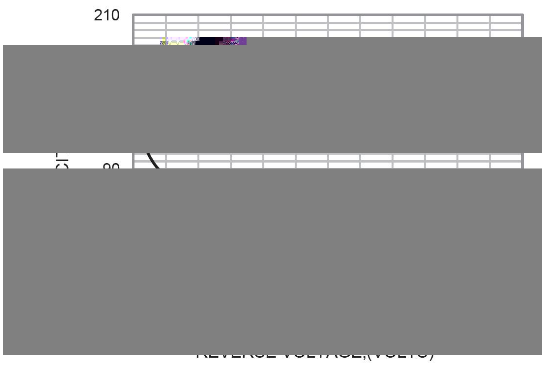


FIG.4-TYPICAL FORWARD CHARACTERISTICS

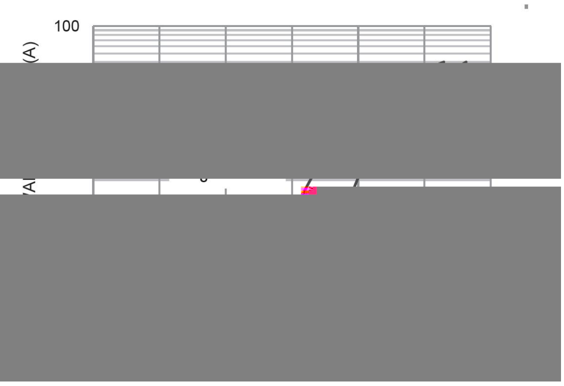
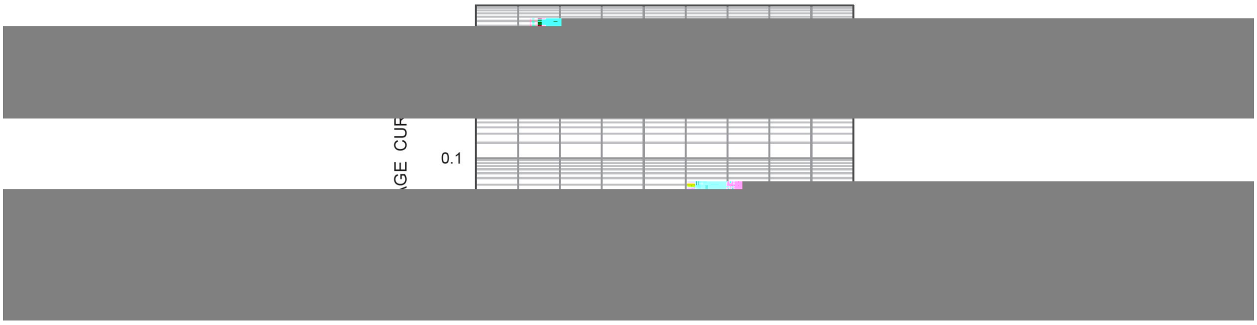
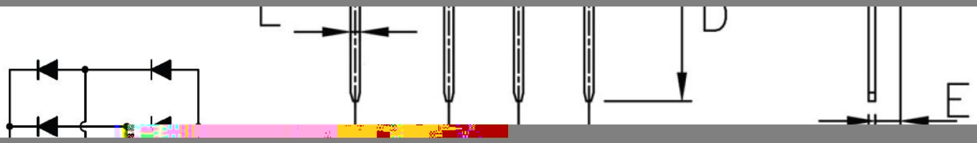


FIG.5-TYPICAL REVERSE CHARACTERISTICS

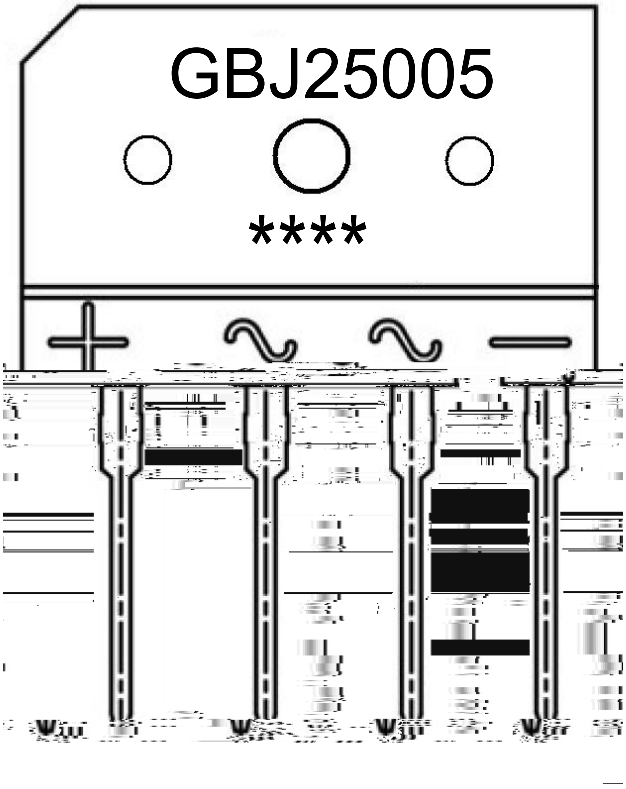


/ Package Dimensions

GBJ Package Outline Dimensions



/ Marking Instructions



GBJ25005

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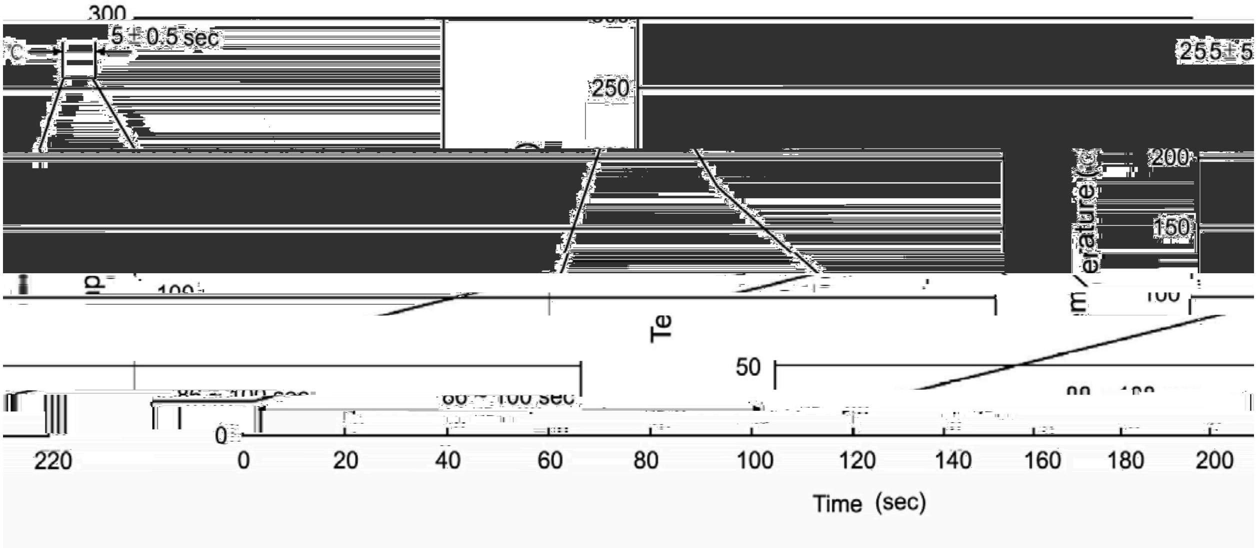
Note:

GBJ25005:	Product Type.
****:	Lot No. Code, code change with Lot No.

( ) / Temperature Profile for Dip Soldering(Pb-Free)



说明：	Note:
1、预热温度 25～150℃，时间 60～90sec;	1.Preheating:25~150℃, Time:60~90sec.
2、峰值温度 255±5℃，时间持续为 5±0.5sec;	2.Peak Temp.:255±5℃, Duration:5±0.5sec.
3、焊接制程冷却速度为 2～10℃/sec.	3. Cooling Speed: 2~10℃/sec.

/ Resistance to Soldering Heat Test Conditions

温度：270±5℃	时间：10±1 sec.	Temp.:270±5℃	Time:10±1 sec

/ Packaging SPEC.

散件包装