GBU10005~GBU1010

Rev.A.Aug.-2019

DATA SHEET

5 Ø / Descriptions

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Glass Passivated Bridge Rectifiers, Reverse Voltage:50~1000V,Forward Current:10.0A,GBU package.

/" / Features

i PCB Æ # + k.> % ÀÙĆk.> UL £˘¯ · 94V-0o)í D }o

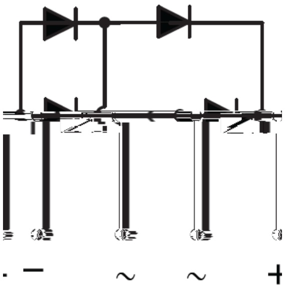
Ldeal for printed circuit bodrd,Case material molded plastic,The plastic material has U/L flammability classification 94V-0. Halogen free product.

— ÷ / Applications

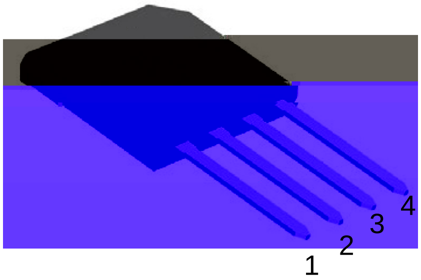
%† " (.

General purpose.

ˆ W] Ô / Equivalent Circuit



Û- æ / Pinning



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

Z ÜB , M V / h_{FE} Classifications & Marking

- ~ " ¢o See Marking Instructions

ˆ a ? d / Absolute Maximum Ratings(Ta=25 ;)

@ Parameter	Z Symbol	Rating							% y Unit
		GBU 10005	GBU 1001	GBU 1002	GBU 1004	GBU 1006	GBU 1008	GBU 1010	
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)	$I_{F(AV)}$	10.0							A
Maximum Average Forward Rectified Current @T_C=100 (without heatsink)		3.0							A
Peak Forward Surage Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	220							A
I^2t Rating for Fusing (t<8.3ms)	I^2t	200							A^2s
Typical Junction Capacitance Per Element (Note1)	CJ	86							pF
Typical Thermal Resistance (Note2)	R Jc	2.0							/W
Operating 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.

Ĉ4ì ×? d / Electrical Characteristics(Ta=25 ;)

@ Parameter	Z Symbol	y ¡ Ǘ^ Test Conditions	Rating	% y Unit
Maximum Forward Voltage	V_F	I_F=5.0A	1.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	T_a=25	5.0	A
		T_a=125	500	

Ô? d ¢ / Electrical Characteristic Curve

FIG.1-FORWARD CURRENT DERATING CURVE

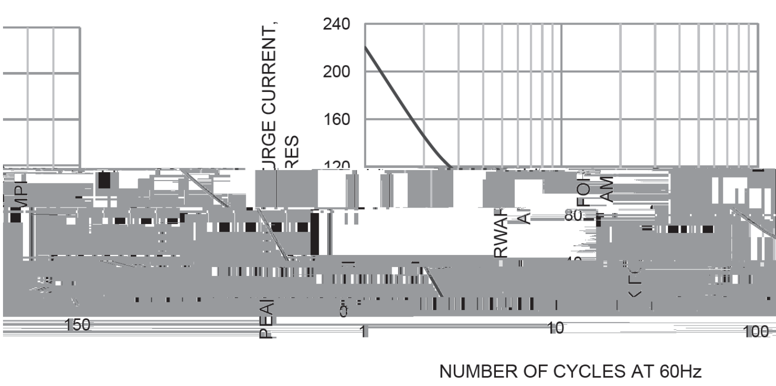


FIG.2-MAXIMUM FOWARD SURGE CURRENT

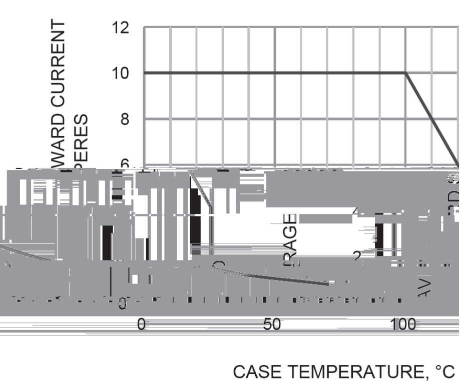


FIG.4-TYPICAL FORWARD CHARACTERISTICS

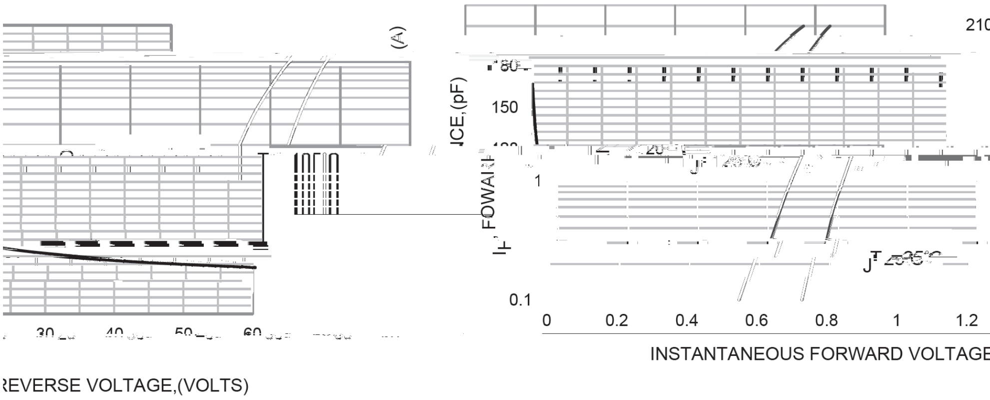


FIG.3-TYPICAL JUNCTION CAPACITANCE

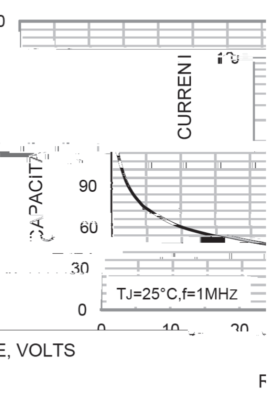
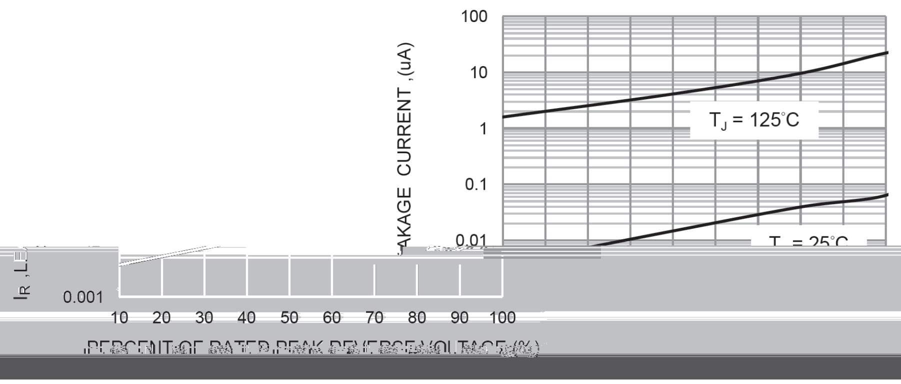
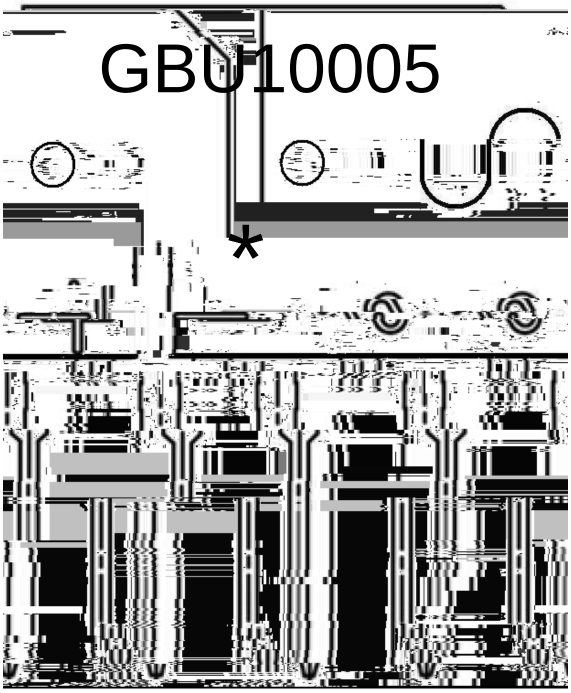


FIG.5-TYPICAL REVERSE CHARACTERISTICS



, M y / Marking Instructions



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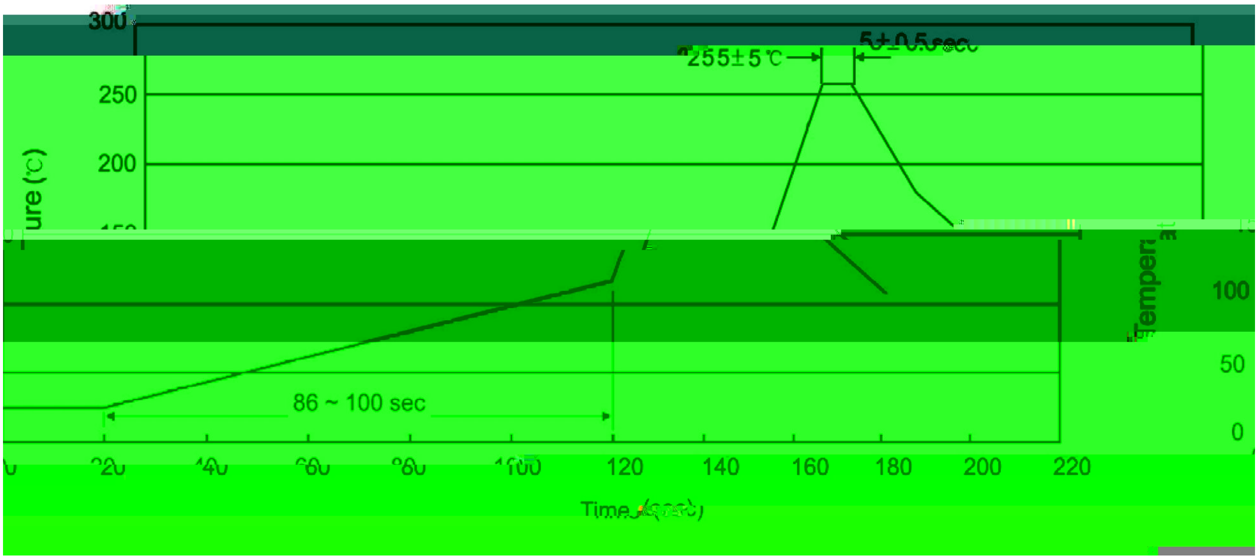
- (; y D } ” Z

y ÿD Z W A k ÿD Z J

4 U Z K

GBU10005:	Product Type.
****:	Lot No. Code, code change with Lot No.

G PD t ¢ (x /) / Temperature Profile for Dip Soldering(Pb-Free)



“ ¢ y	Note:
1o ˜ ‰ 25 %150 - k 60 %90sec;	1.Preheating:25~150 - , Time:60~90sec.
2o Q 255 r5 - k 4 Ò 5 r0.5sec;	2.Peak Temp.:255 r5 - , Duration:5 r0.5sec.
3o D N òi Ò0 , 2 %10 - /sec.	3. Cooling Speed: 2~10 - /sec.

´D /Cª p fl »] / Resistance to Soldering Heat Test Conditions

y 270 r5 - y 10 r1 sec. Temp.:270±5 Time:10±1 sec

G P Æ / Packaging SPEC.

^ x / BULK

Package Type ß m ù ´	Units g m ô h					Dimension g m d Ê (unit ! cm^3)		
	[illegible] / ß	[illegible] ß / ç	[illegible] / ç	[illegible] ç / ±	[illegible] / ±	[illegible] ß	[illegible] ç	[illegible] ±
[illegible]	-	-	[illegible]	[illegible]	[illegible]	-	[illegible] ×[illegible] ×[illegible]	[illegible] ×[illegible] ×[illegible]

— y / Notices