/ Descriptions

50~1000V 10.0A GBU

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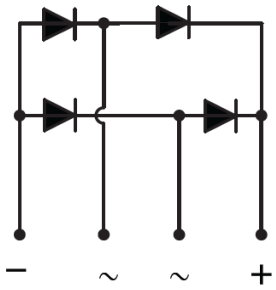
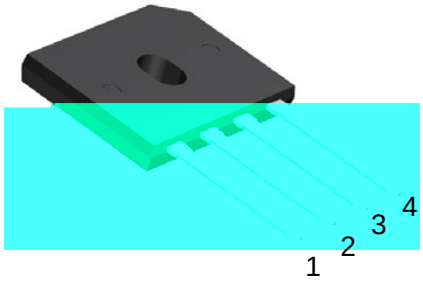
General purpose.

/ Equivalent Circuit



/ Pinning



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

/ h_{FE} Classifications & Marking

See Marking Instructions

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating							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)	$R_{\theta Jc}$	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.

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Rating	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	μA
		T_a=125	500	

/ Electrical Characteristic Curve

FIG.1-FORWARD CURRENT DERATING CURVE

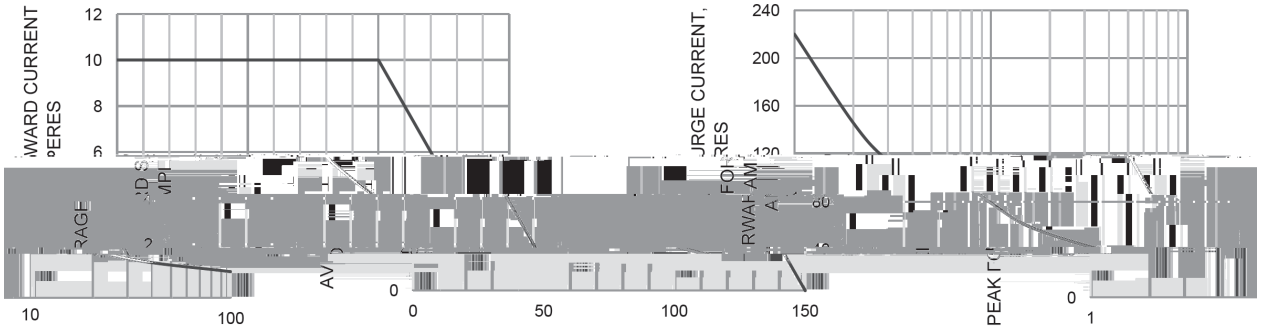


FIG.2-MAXIMUM FOWARD SURGE CURRENT

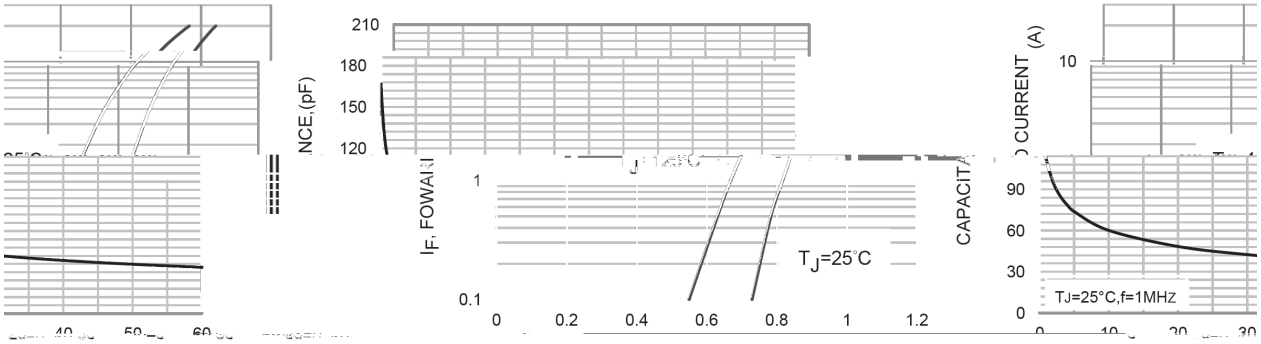
OF CYCLES AT 60Hz

NUMBER

WARD CHARACTERISTICS

FIG.3-TYPICAL JUNCTION CAPACITANCE

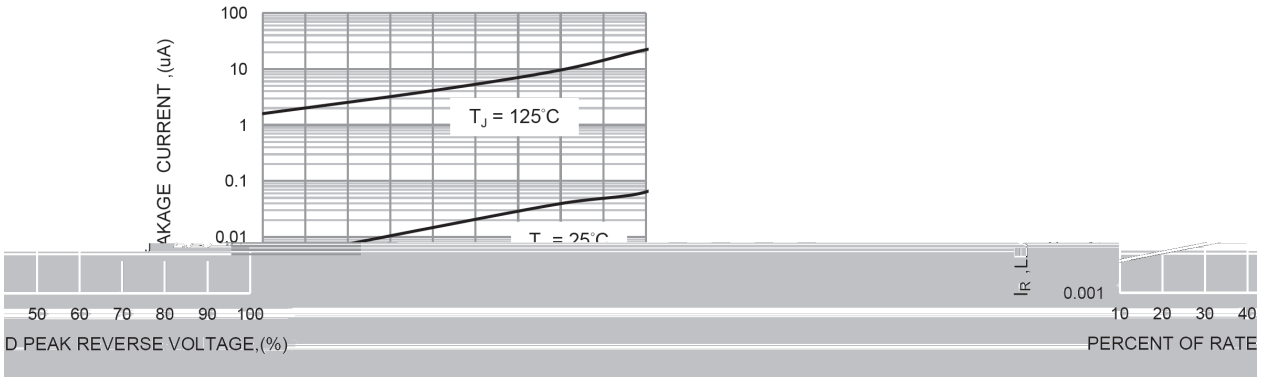
FIG.4-TYPICAL FOR



SE VOLTAGE,(VOLTS)

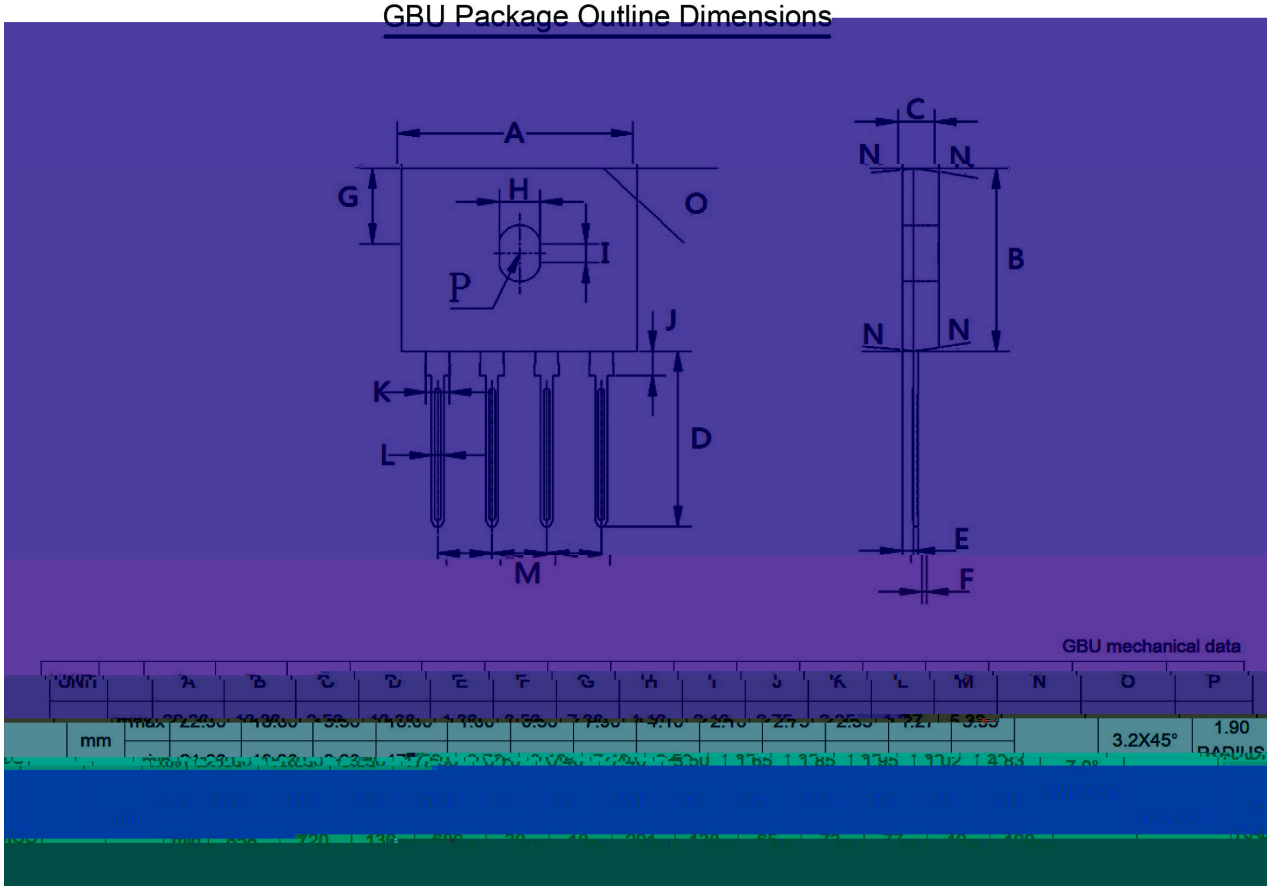
REVER

FIG.5-TYPICAL REVERSE CHARACTERISTICS



/ Package Dimensions

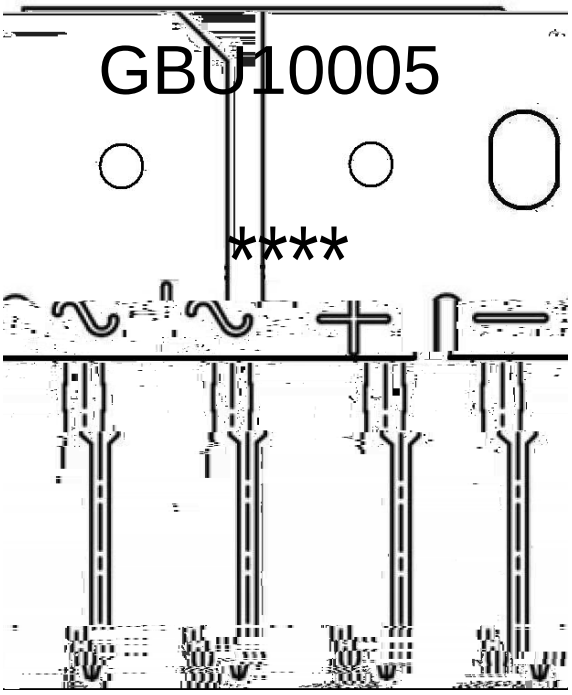
GBU Package Outline Dimensions



GBU mechanical data

DIM.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
mm	max														3.2X45°	1.90 RADIUS

/ Marking Instructions



GBU10005

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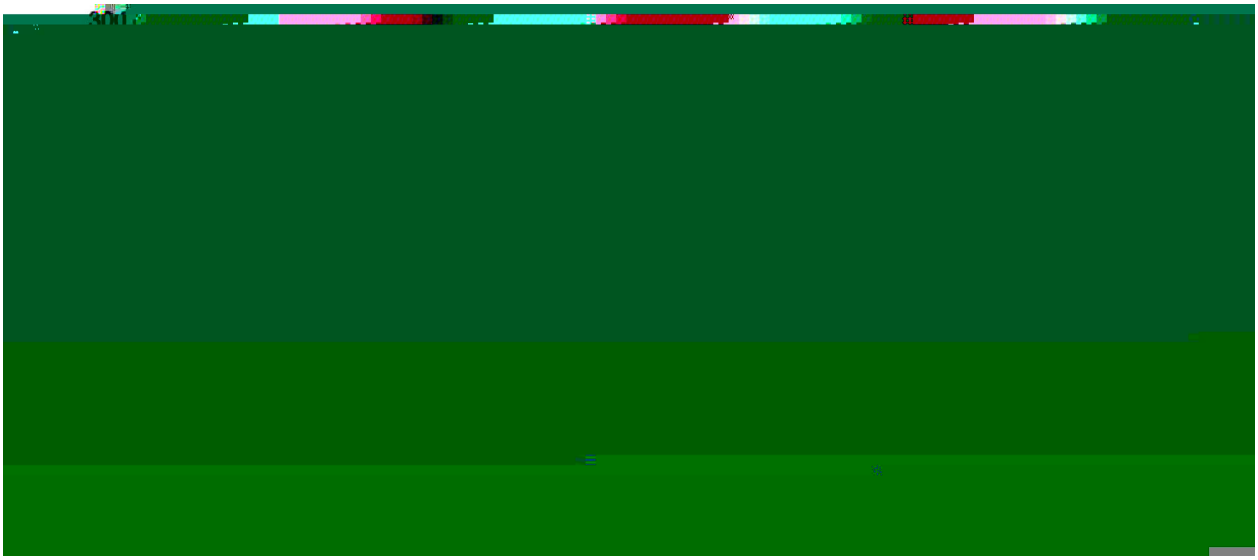
Note:

GBU10005:	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	Units					Dimension		(unit cm^3)
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
GBU	-	-	350	10	3500	-	314×106×39	330×242×237

/ Notices