

GBU6005~GBU610

Rev.B Dec.-2022

DATA SHEET

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating							Unit
		GBU 6005	GBU 601	GBU 602	GBU 604	GBU 606	GBU 608	GBU 610	
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)	$I_{F(AV)}$	6							A
Maximum Average Forward Rectified Current @T _c =100 (without heatsink)		2.8							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	175							A
I ² t Rating for Fusing (t<8.3ms)	I^2t	127							A ² s
Typical Junction Capacitance Per Element (Note1)	C_J	50							pF
Typical Thermal Resistance (Note2)	$R_{\theta Jc}$	2.5							/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	$I_F=3.0A$	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

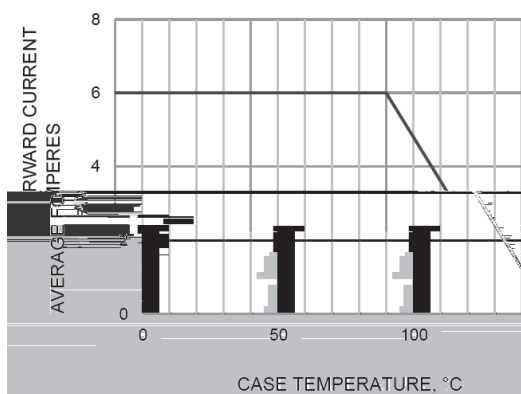


FIG.2-MAXIMUM FORWARD SURGE CURRENT

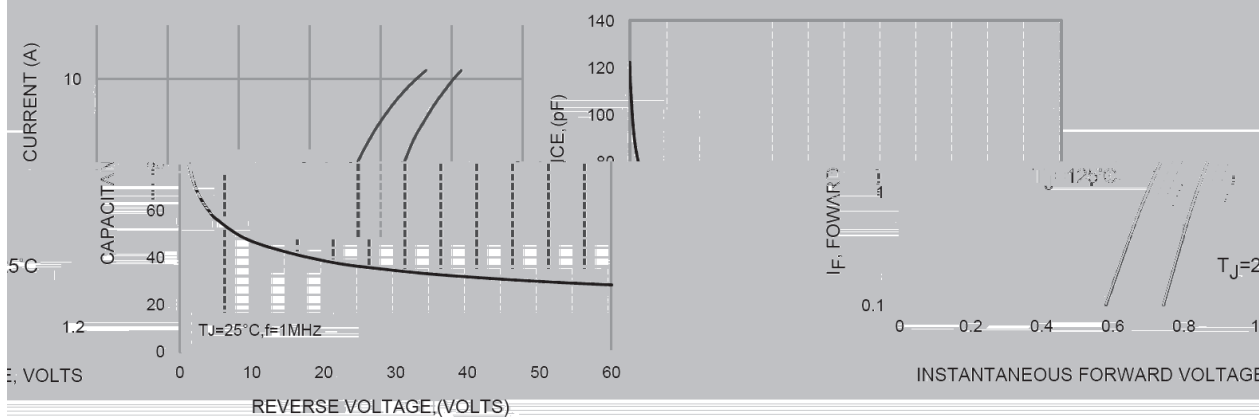
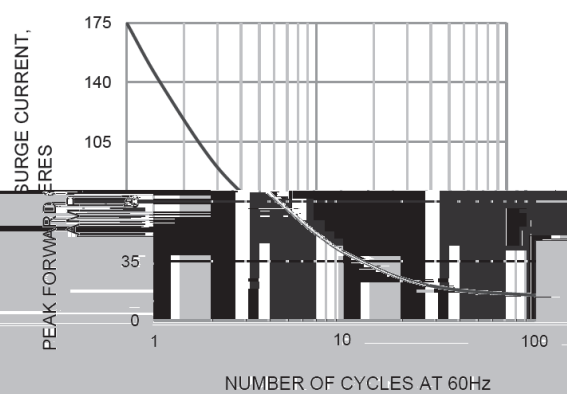
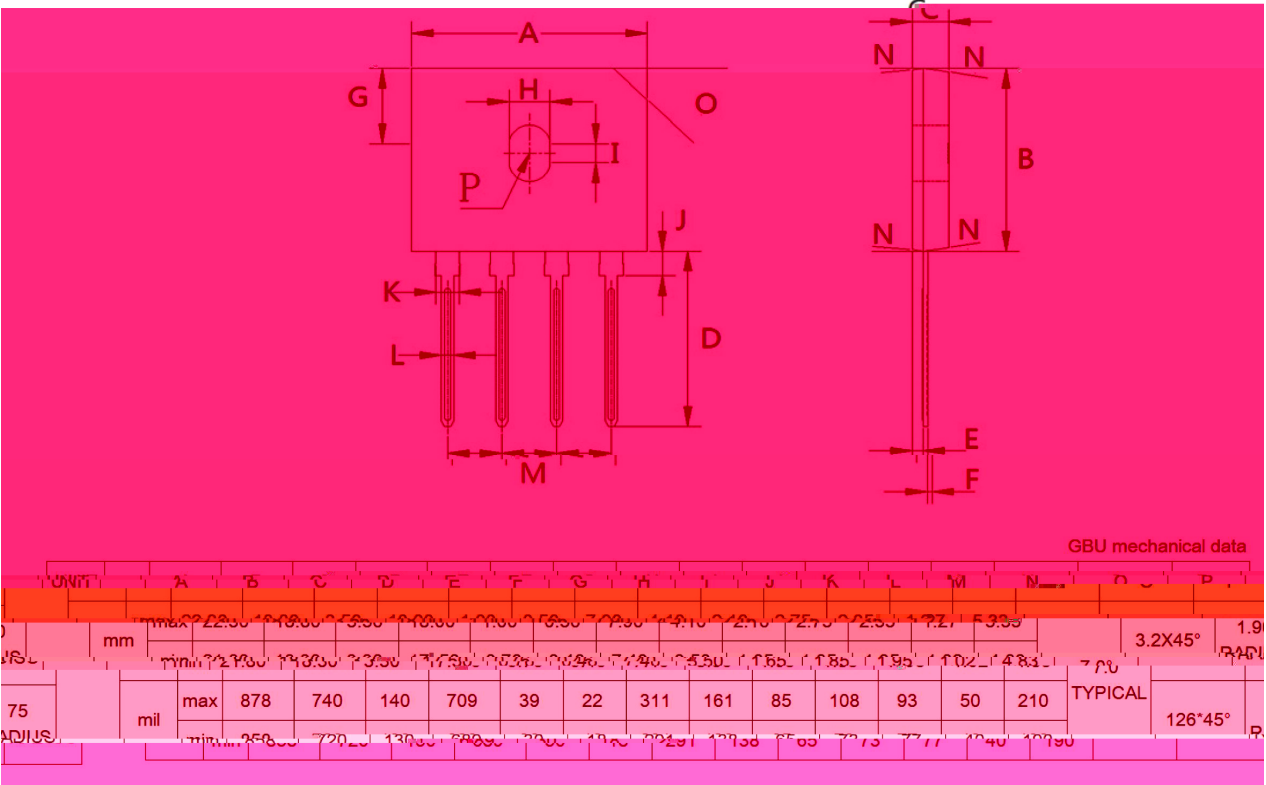


FIG.5-TYPICAL REVERSE CHARACTERISTICS

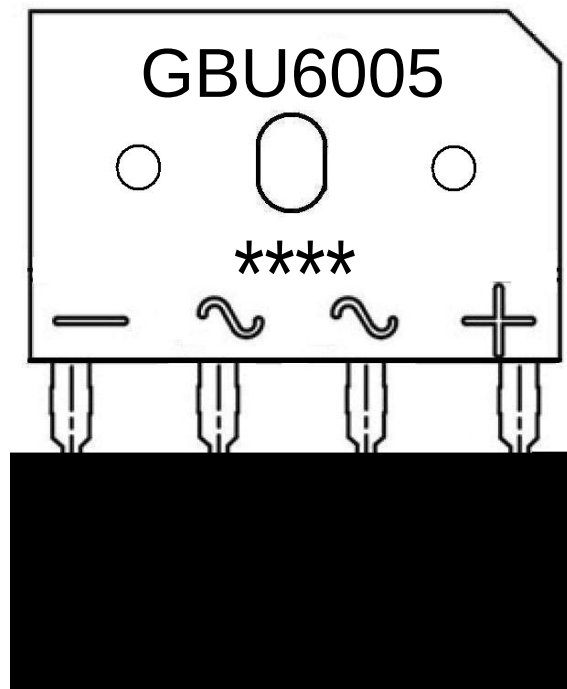


/ Package Dimensions

GBU Package Outline Dimensions



/ Marking Instructions



GBU6005

Note:

GBU6005:

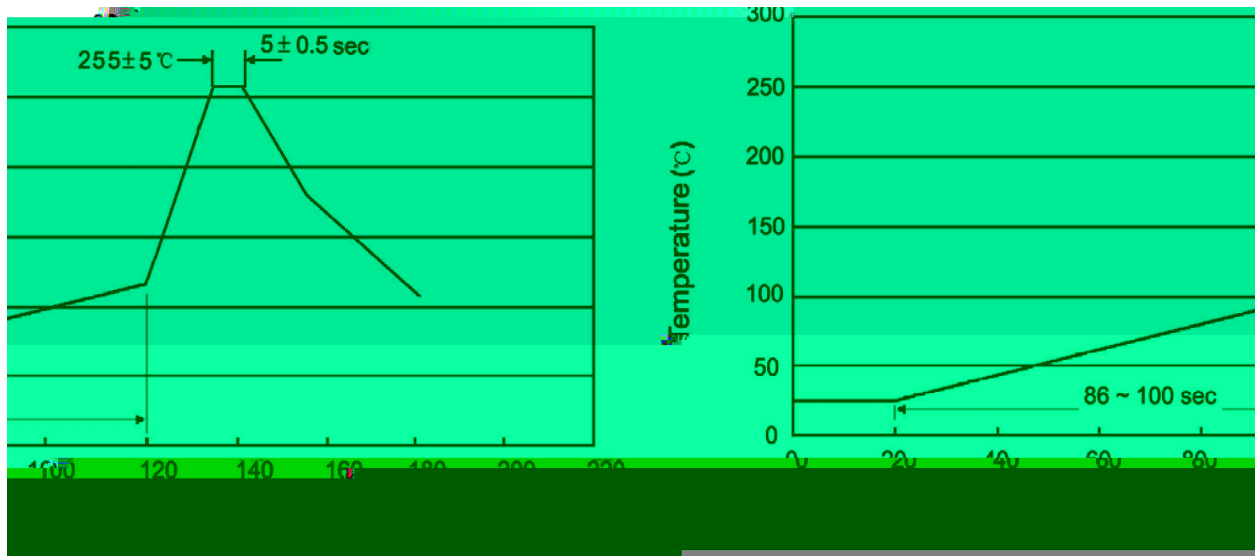
Product Type.

****:

Lot No. Code, code change with Lot No



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



Note:

- 1 25 150 60 90sec;
- 2 255±5 5±0.5sec;
- 3 2 10 /sec.

- 1.Preheating:25~150 , Time:60~90sec.
- 2.Peak Temp.:255±5 , Duration:5±0.5sec.
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 mm 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

/ TUBE

Package Type	Units	Dimension	(unit mm ³)
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