

/ Descriptions

GBU

Ultrafast Recovery rectifier bridge in a GBU Plastic Package.

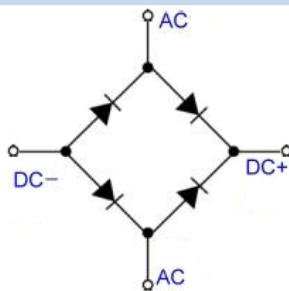
/ Features

Glass passivated process to produce Ultrafast Recovery rectifier bridge ,with low reverse leakage current and high reliability.

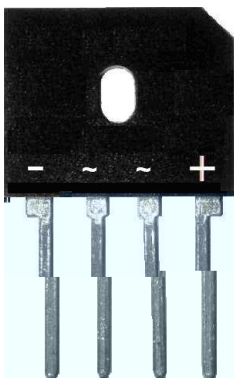
/ Applications

For high frequency, high voltage, high current rectifier diode, freewheeling diode。

/ Equivalent Circuit



/ Pinning



1 2 3 4

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
Peak Repetitive Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Current	$I_{(AV)}$	4×25	A
Peak forward surge current	I_{FSM}	180	A
Typical Thermal Resistance Junction to Case	$R_{\theta JC}$	2.2	°C/W
Junction Temperature Range	T_J	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_R	$I_R=1mA$	600	680		V
Forward Voltage	V_F	$I_F=5A$ $T_C=25^\circ C$		1.29	1.45	V
		$I_F=5A$ $T_C=125^\circ C$		1.05	1.25	
		$I_F=12.5A$ $T_C=25^\circ C$		1.68	2.25	
		$I_F=12.5A$ $T_C=125^\circ C$		1.30	1.65	
		$I_F=25A$ $T_C=25^\circ C$		2.10	2.65	
		$I_F=25A$ $T_C=125^\circ C$		1.70	2.15	
Instantaneous Reverse Current	I_R (Note 1)	$V_R=600V$ $T_a=25^\circ C$			10	μA
		$V_R=600V$ $T_a=125^\circ C$			500	
Reverse Recovery Time	t_{rr}	$I_F=0.5A$ $I_R=1.0A$ $I_{RR}=0.25A$		40	50	ns

/Notes:

1.
effect.

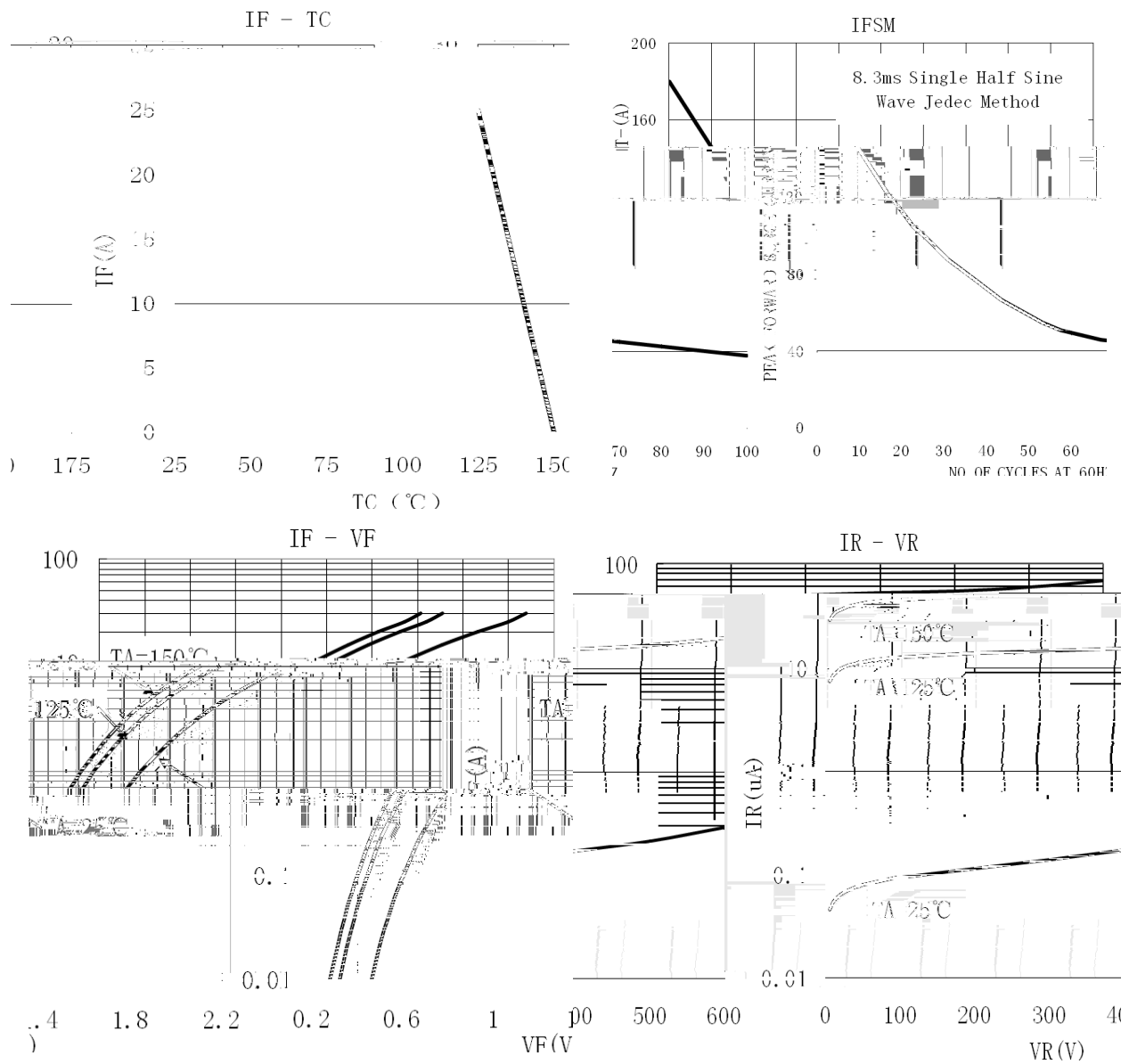
/Short duration pulse test used to minimize self-heating

2.
single chip

/ Unless otherwise noted, values for the parameters of a

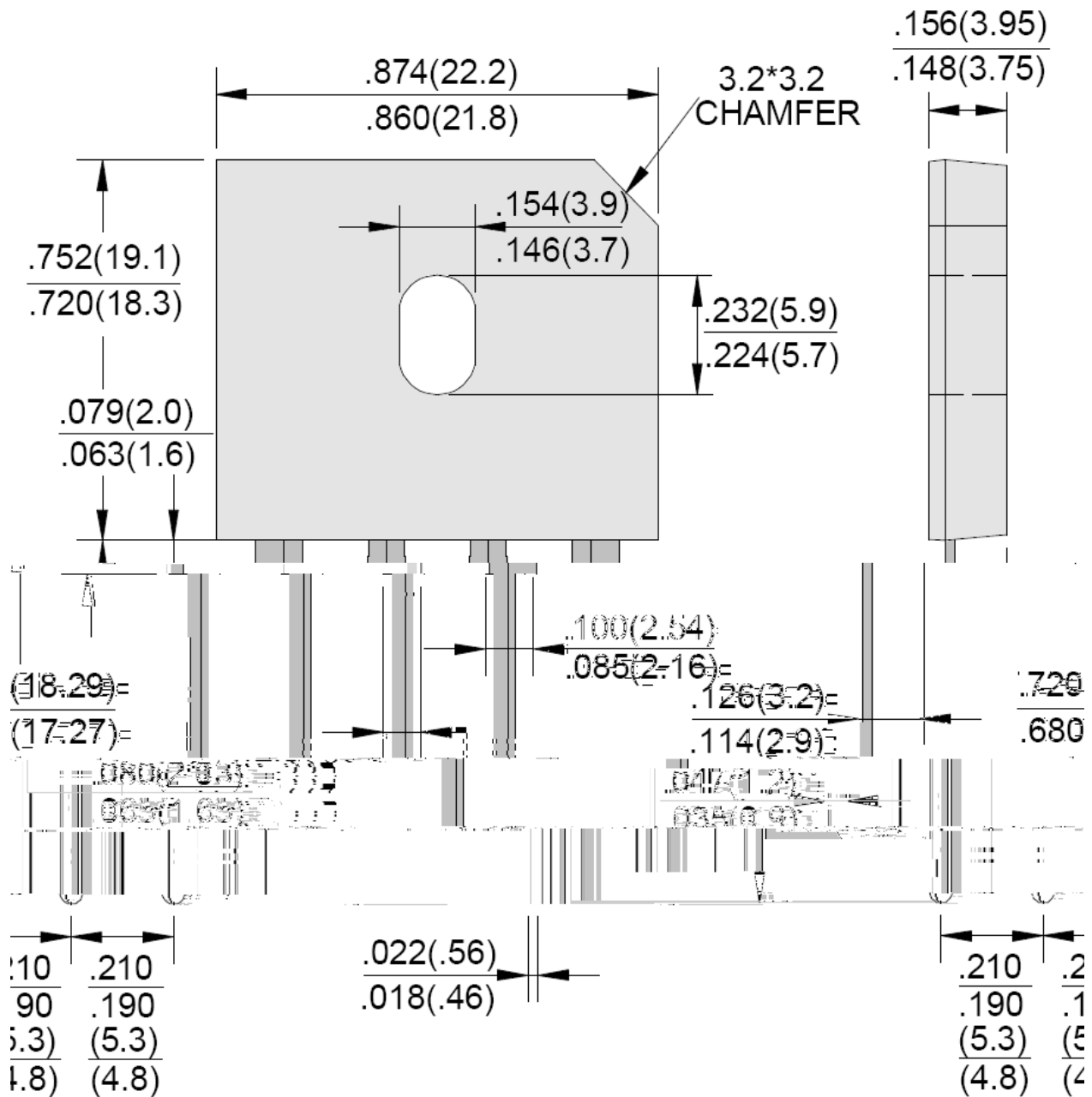


/ Electrical Characteristic Curve





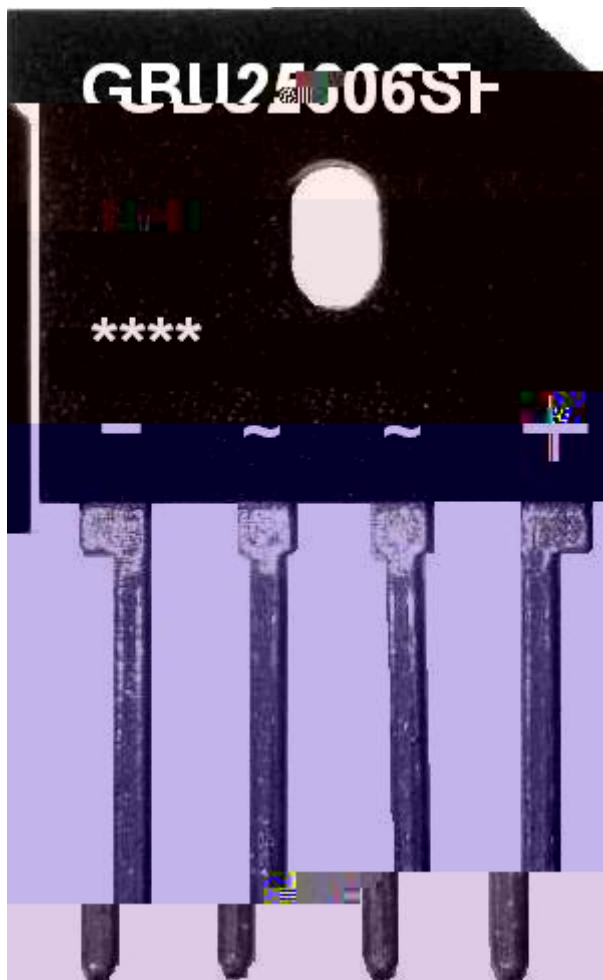
/ Package Dimensions

GBU

in inches and (millimeters)

Dimensions

/ Marking Instructions



GBU2006SF

- AC +

Note:

GBU2006SF

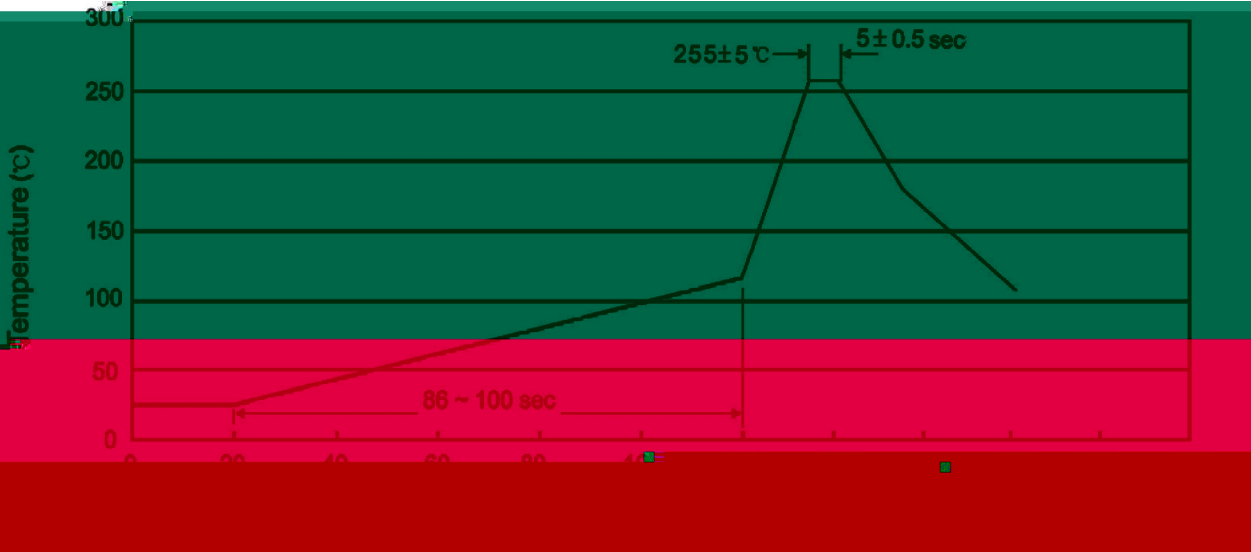
- AC +

Product Type

Lot No. Code, code change with Lot No.

Pin function

() / 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 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
GBU	-	-	500	10	5,000	-	230×205×48	435×240×255

/ Notices