

/ Descriptions

Ultrafast Recovery rectifier bridge in a GBU Plastic Package.

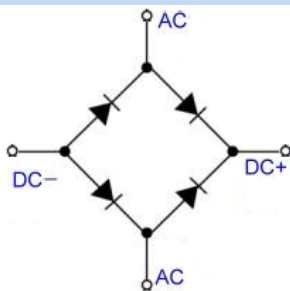
/ Features

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

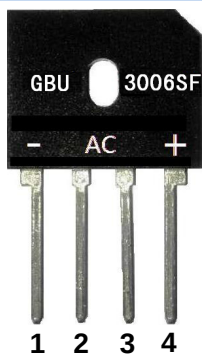
/ Applications

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

/ Equivalent Circuit



/ Pinning



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 × 30	A
Peak forward surge current	I_{FSM}	250	A
Typical Thermal Resistance Junction to Case	R_{JC}	0.6	/W
Junction Temperature Range	T_J	150	
Storage Temperature Range	T_{stg}	-55 150	

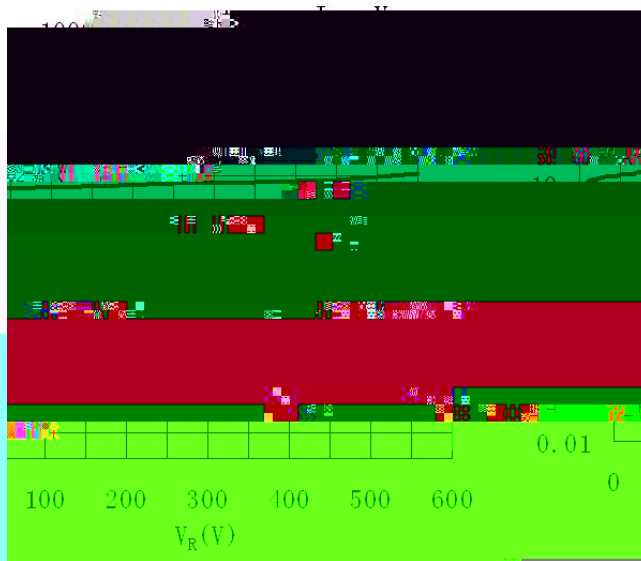
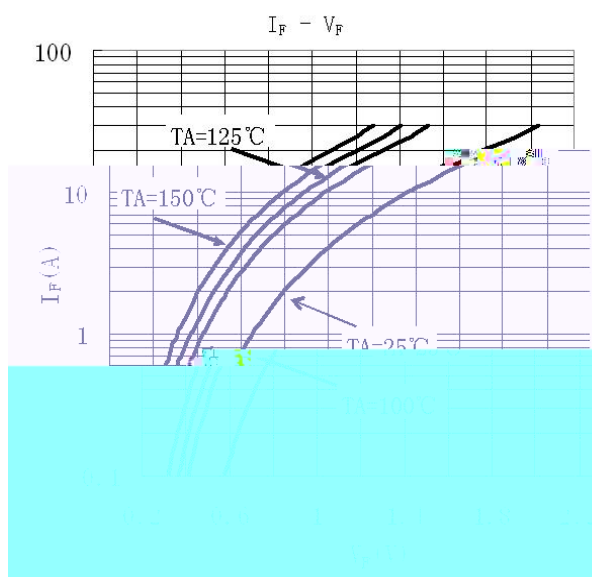
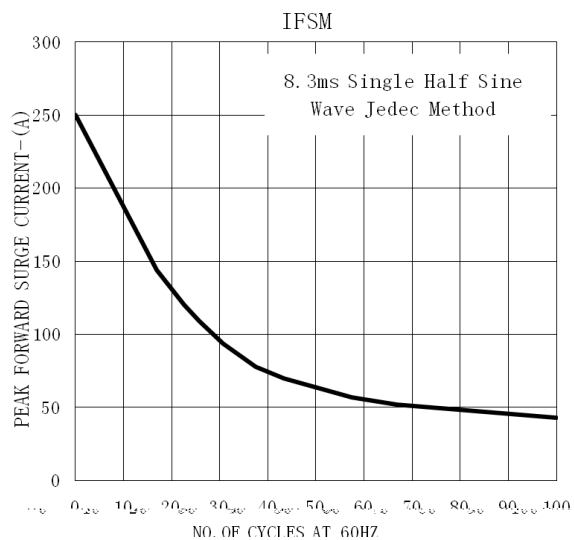
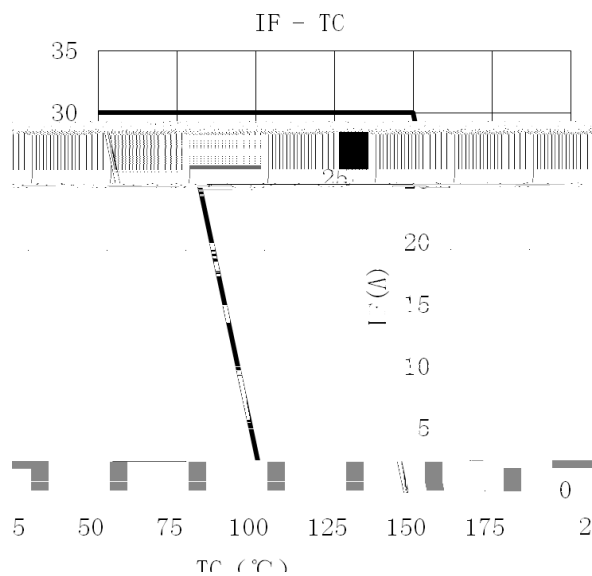
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_R	$I_R=1mA$	600	650		V
Forward Voltage	V_F	$I_F=5A \quad T_C=25$		1.28	1.45	V
		$I_F=5A \quad T_C=125$		0.90	1.25	
		$I_F=15A \quad T_C=25$		1.80	2.25	
		$I_F=15A \quad T_C=125$		1.26	1.65	
		$I_F=30A \quad T_C=25$		2.25	2.65	
		$I_F=30A \quad T_C=125$		1.65	2.15	
Instantaneous Reverse Current	I_R Note 1	$V_R=600V \quad T_a=25$			10	A
		$V_R=600V \quad T_a=125$			500	
Reverse Recovery Time	t_{rr}	$I_F=0.5A \quad I_R=1.0A$ $I_{RR}=0.25A$		35	50	ns

Notes

- Short duration pulse test used to minimize self-heating effect.
- Unless otherwise noted, values for the parameters of a single chip

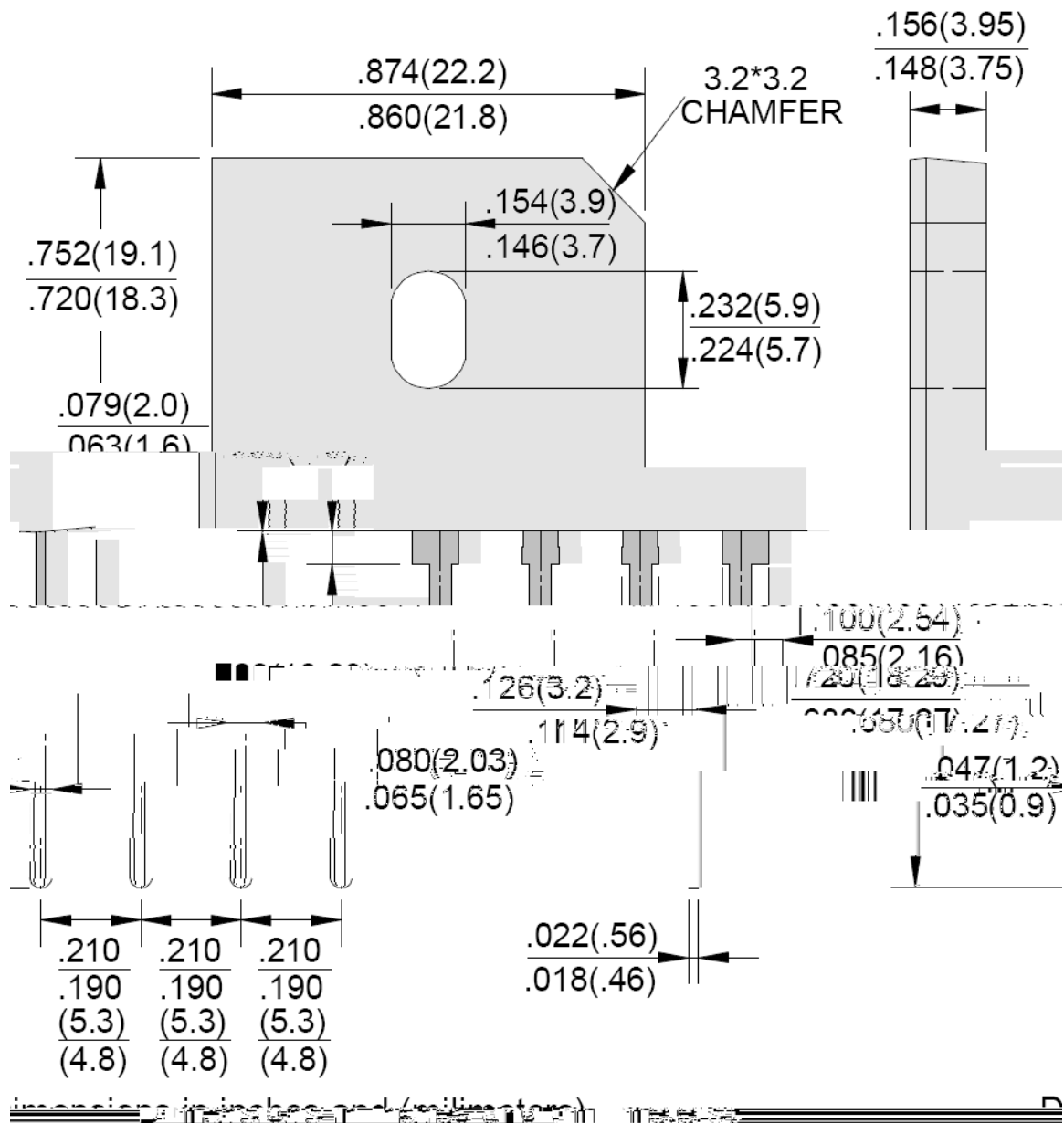
/ Electrical Characteristic Curve



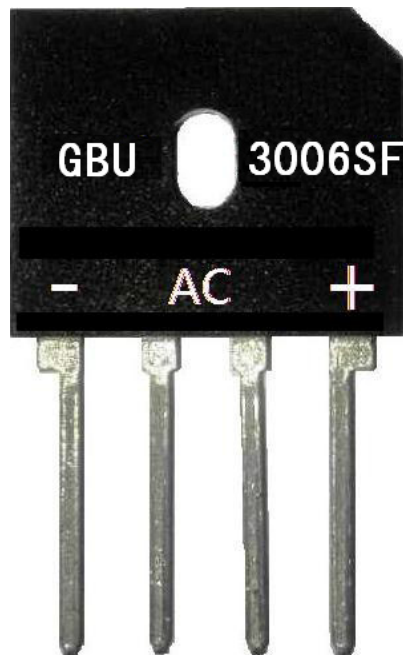


/ Package Dimensions

GBU



/ Marking Instructions

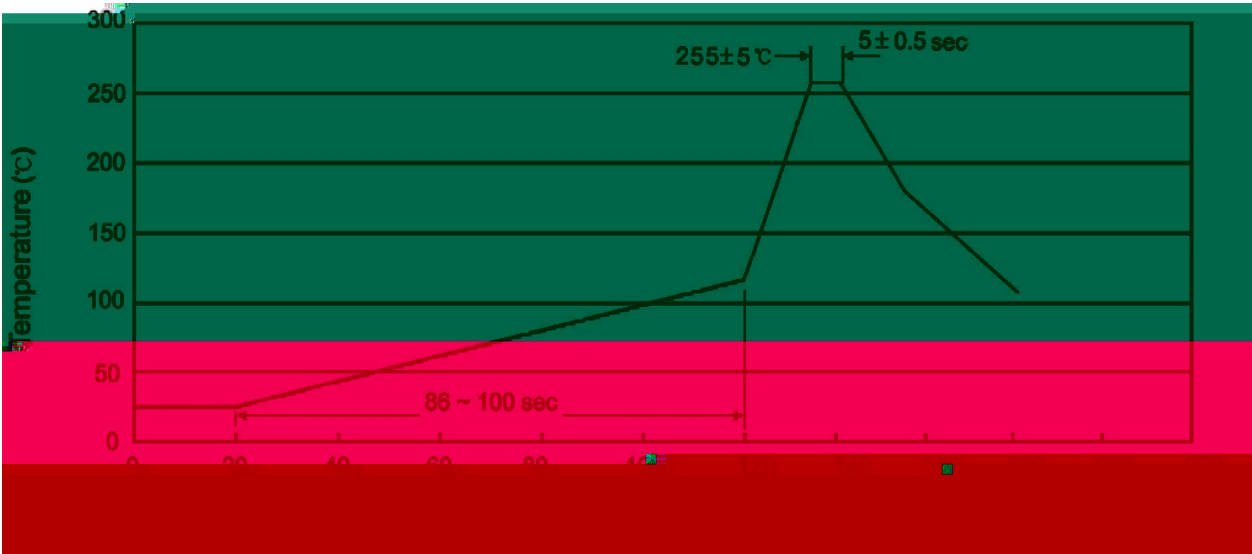


GBU3006SF

Note:

GBU3006SF	Product Type
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() / 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 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	-	203×203×44	445×215×260

/ Notices