

# BRGBU2502SF

Rev.D Oct.-2015

## 描述 / Descriptions

GBU 塑封封装 超快恢复整流桥。

Ultrafast Recovery rectifier bridge in a GBU Plastic Package.

## 特征 / Features

采用玻璃钝化工艺生产的超快恢复整流桥，具有较低的反向漏电和高可靠性。

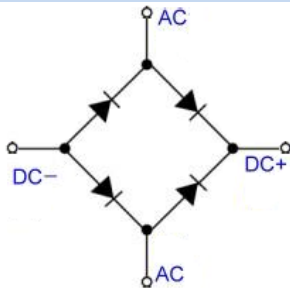
Glass passivated process to produce Ultrafast Recovery rectifier bridge ,with low reverse leakage current and high reliability.

## 用途 / Applications

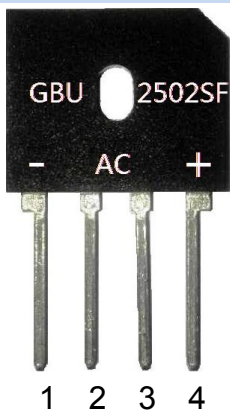
用于高频、高压、大电流整流二极管，续流二极管。

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

## 内部等效电路 / Equivalent Circuit



## 引脚排列 / Pinning



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

## 放大及印章代码 / h<sub>FE</sub> Classifications & Marking

见印章说明。 See Marking Instructions

**极限参数 / Absolute Maximum Ratings(Ta=25°C)**

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	200	V
Maximum RMS Voltage	$V_{RMS}$	140	V
Maximum DC Blocking Voltage	$V_{DC}$	200	V
Maximum Average Forward Current	$I_F$	4×25	A
Peak forward surge current	$I_{FSM}$	400	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

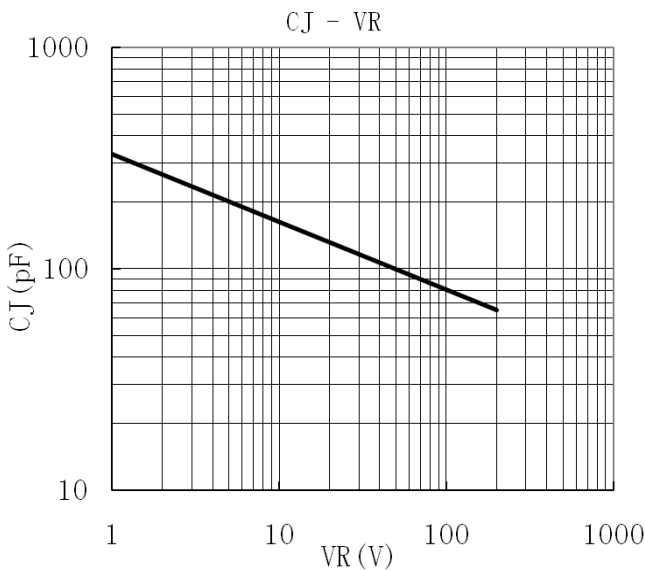
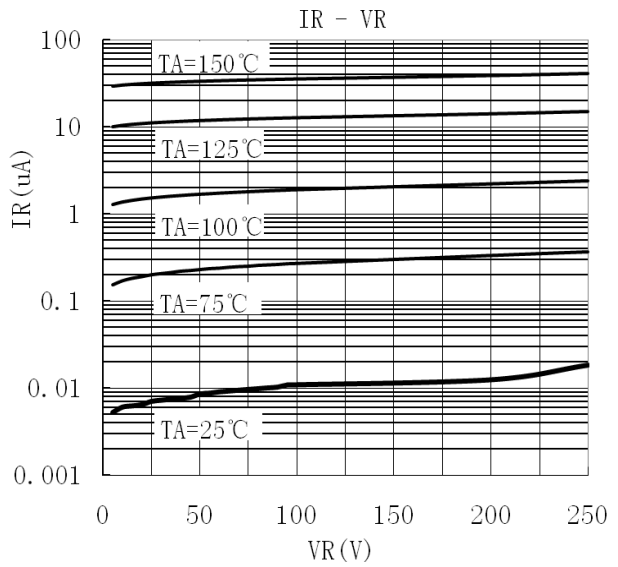
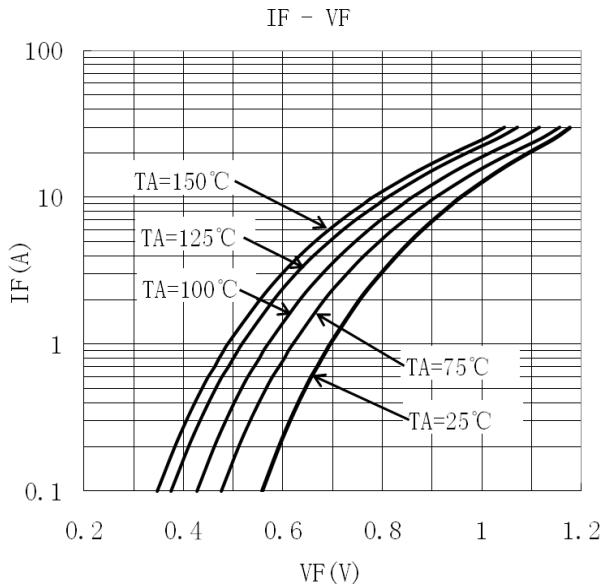
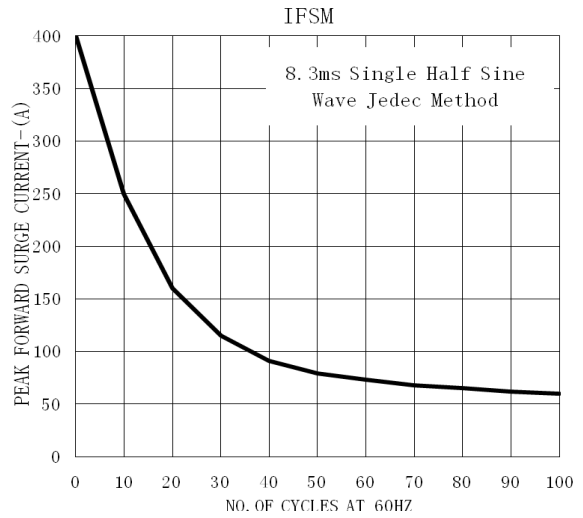
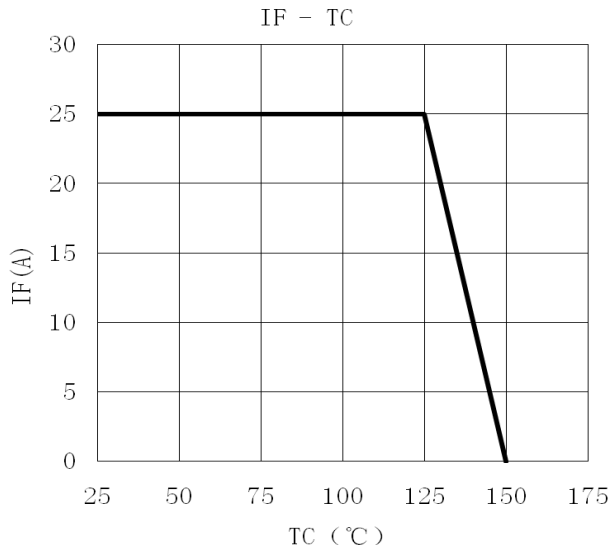
**电性能参数 / Electrical Characteristics(Ta=25°C)**

参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Reverse Voltage	$V_R$	$I_R=1mA$	200			V
Forward Voltage	$V_F$	$I_F=5A$ $T_C=25^\circ C$		0.85	0.95	V
		$I_F=5A$ $T_C=125^\circ C$		0.69	0.85	
		$I_F=12.5A$ $T_C=25^\circ C$		1.05	1.35	
		$I_F=12.5A$ $T_C=125^\circ C$		0.85	1.05	
Instantaneous Reverse Current	$I_R$ (Note 1)	$V_R=200V$ $T_a=25^\circ C$			10	$\mu A$
		$V_R=200V$ $T_a=125^\circ C$			500	
Reverse Recovery Time	$t_{rr}$	$I_F=0.5A$ $I_R=1.0A$ $I_{RR}=0.25A$		35	50	ns

注/Notes:

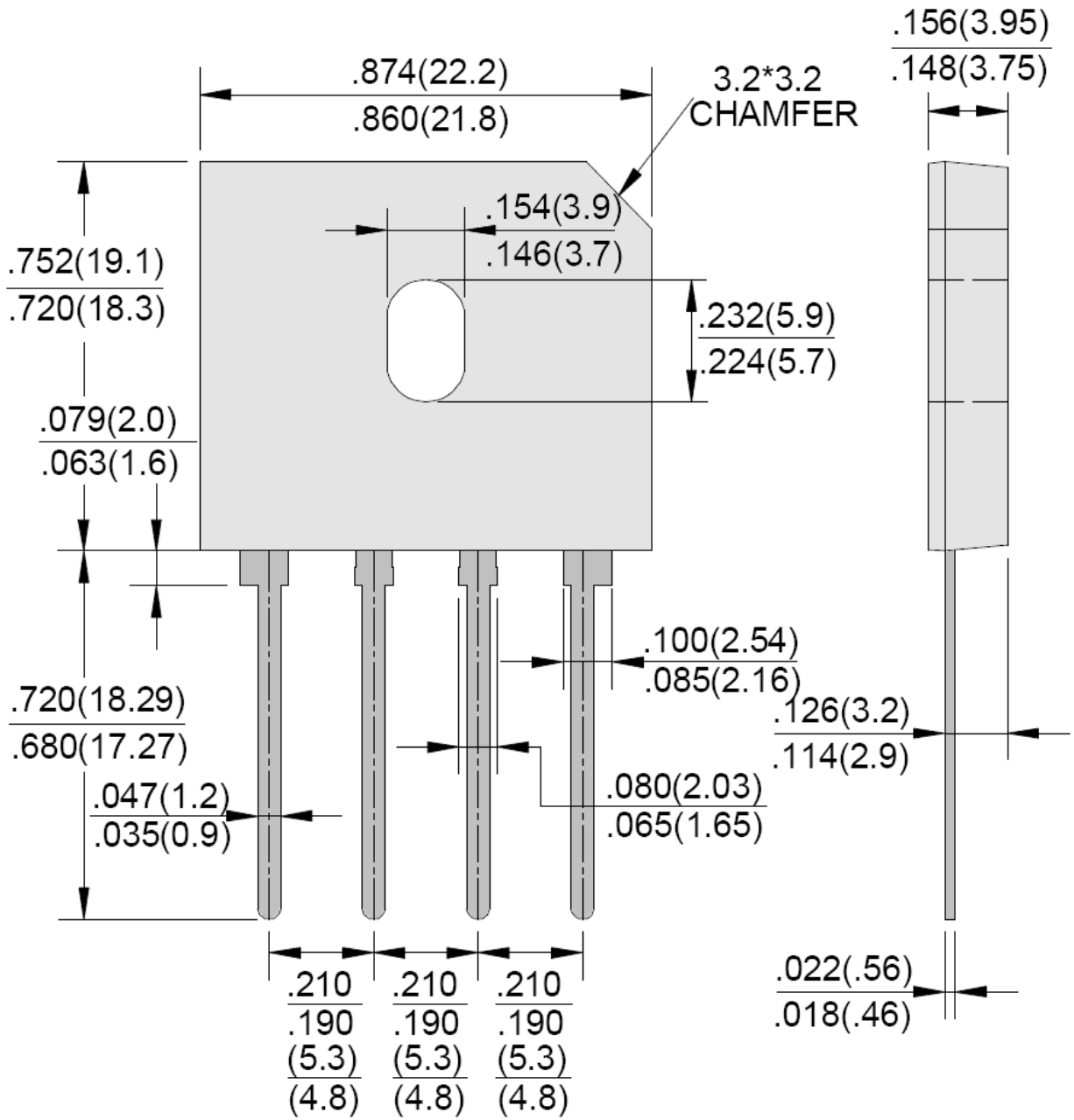
1. 使用极短的测试时间,以尽量减少自热效应。/Short duration pulse test used to minimize self-heating effect.
2. 除非特别注明,数值为一个芯片的参数。/ Unless otherwise noted, values for the parameters of a single chip

**电参数曲线图 / Electrical Characteristic Curve**



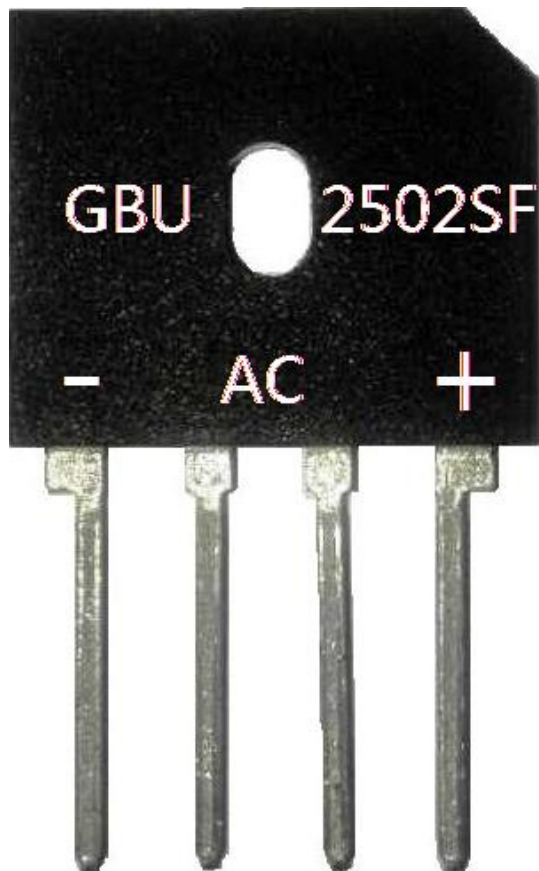
外形尺寸图 / Package Dimensions

**GBU**



Dimensions in inches and (millimeters)

## 印章说明 / Marking Instructions



说明：

GBU2502SF： 产品型号

- AC +： 引脚功能

Note:

GBU2502SF： Product Type

- AC +： Pin function

**波峰焊温度曲线图(无铅) / Temperature Profile for Dip Soldering(Pb-Free)**


说明：

- 1、预热温度 25 ~ 150°C，时间 60 ~ 90sec；
- 2、峰值温度 255±5°C，时间持续为 5±0.5sec；
- 3、焊接制程冷却速度为 2 ~ 10°C/sec.

Note:

- 1.Preheating:25~150°C, Time:60~90sec.
- 2.Peak Temp.:255±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

**耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions**

温度：270±5°C

时间：10±1 sec.

Temp.:270±5°C

Time:10±1 sec

**包装规格 / Packaging SPEC.**

散件包装 / BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	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

**使用说明 / Notices**