

# 桥式整流器 Bridge Rectifier

## GBU15005 THRU GBU1510

### ■ 特征 Features

- $I_o$  15A
- $V_{RRM}$  50V~1000V
- 玻璃钝化芯片  
Glass passivated chip
- 耐正向浪涌电流能力高  
High surge forward current capability

### ■ 用途 Applications

- 作一般电源单相桥式整流用  
General purpose 1 phase Bridge rectifier applications

### ■ 极限值 (绝对最大额定值)

#### Limiting Values (Absolute Maximum Rating)

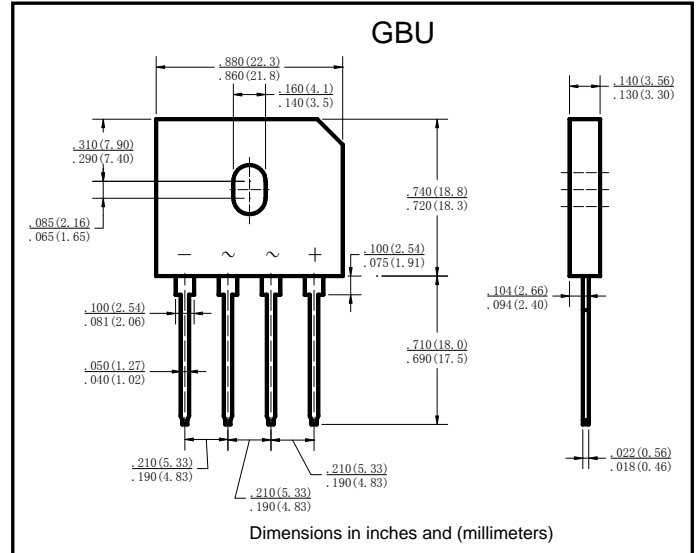
参数名称 Item	符号 Symbol	单位 Unit	条件 Conditions	GBU15						
				005	01	02	04	06	08	10
反向重复峰值电压 Repetitive Peak Reverse Voltage	$V_{RRM}$	V		50	100	200	400	600	800	1000
平均整流输出电流 Average Rectified Output Current	$I_o$	A	60Hz正弦波, 电阻负载 60Hz sine wave, R-load	用散热片 $T_c = 100^\circ\text{C}$ With heatsink $T_c = 100^\circ\text{C}$	15					
				无散热片 $T_a = 25^\circ\text{C}$ Without heatsink $T_a = 25^\circ\text{C}$	3.2					
正向(不重复)浪涌电流 Surge(Non-repetitive)Forward Current	$I_{FSM}$	A	60Hz正弦波, 一个周期, $T_j = 25^\circ\text{C}$ 60Hz sine wave, 1 cycle, $T_j = 25^\circ\text{C}$	220						
正向浪涌电流的平方对电流浪涌持续时间的积分值 Current Squared Time	$I^2t$	$\text{A}^2\text{S}$	$1\text{ms} \leq t < 8.3\text{ms}$ $T_j = 25^\circ\text{C}$ , 单个二极管 $1\text{ms} \leq t < 8.3\text{ms}$ $T_j = 25^\circ\text{C}$ , Rating of per diode	200						
存储温度 Storage Temperature	$T_{stg}$	$^\circ\text{C}$		-55 ~ +150						
结温 Junction Temperature	$T_j$	$^\circ\text{C}$		-55 ~ +150						
绝缘耐压 Dielectric Strength	$V_{dis}$	KV	端子与外壳之间外加交流电, 一分钟 Terminals to case, AC 1 minute	2						
安装扭矩 Mounting Torque	$T_{or}$	$\text{kg} \cdot \text{cm}$	推荐值: $5\text{kg} \cdot \text{cm}$ Recommend torque: $5\text{kg} \cdot \text{cm}$	8						

### ■ 电特性 ( $T_a = 25^\circ\text{C}$ 除非另有规定)

#### Electrical Characteristics ( $T_a = 25^\circ\text{C}$ Unless otherwise specified)

参数名称 Item	符号 Symbol	单位 Unit	测试条件 Test Condition	最大值 Max
正向峰值电压 Peak Forward Voltage	$V_{FM}$	V	$I_{FM} = 7.5\text{A}$ , 脉冲测试, 单个二极管的额定值 $I_{FM} = 7.5\text{A}$ , Pulse measurement, Rating of per diode	1.1
反向峰值电流 Peak Reverse Current	$I_{RRM}$	$\mu\text{A}$	$V_{RM} = V_{RRM}$ , 脉冲测试, 单个二极管的额定值 $V_{RM} = V_{RRM}$ , Pulse measurement, Rating of per diode	10
热阻 Thermal Resistance	$R_{\theta J-A}$	$^\circ\text{C}/\text{W}$	结和环境之间, 无散热片 Between junction and ambient, Without heatsink	23
	$R_{\theta J-C}$		结和管壳之间, 用散热片 Between junction and case, With heatsink	1.8

### ■ 外形尺寸和印记 Outline Dimensions and Mark



## ■ 特性曲线 (典型) Characteristics(Typical)

图1:  $I_o$ - $T_c$  曲线  
FIG1:  $I_o$ - $T_c$  Curve

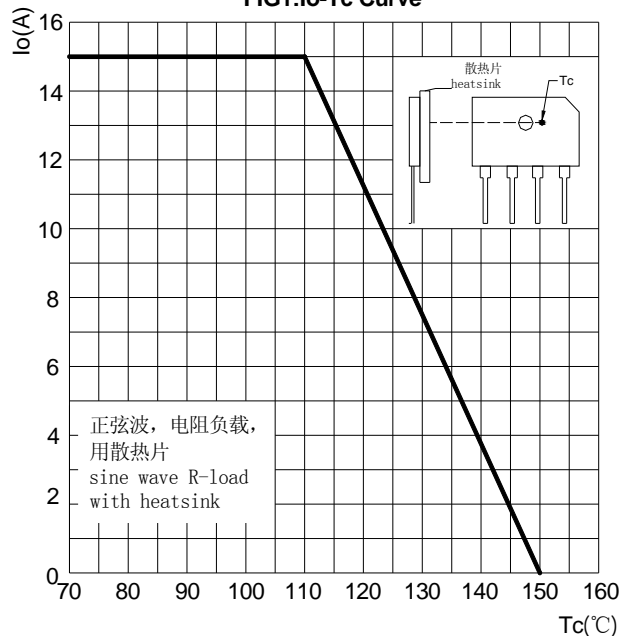


图2: 耐正向浪涌电流曲线  
FIG2: Surge Forward Current Capacity

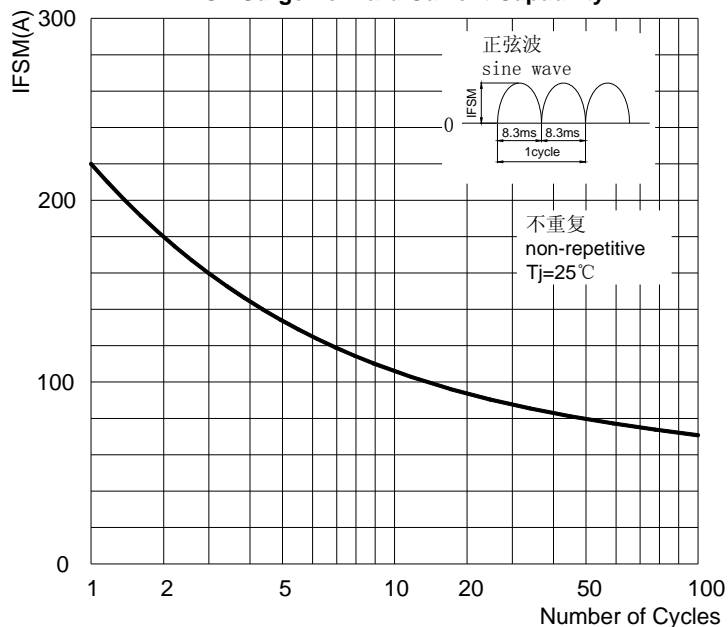


图3: 正向电压曲线  
FIG3: Forward Voltage

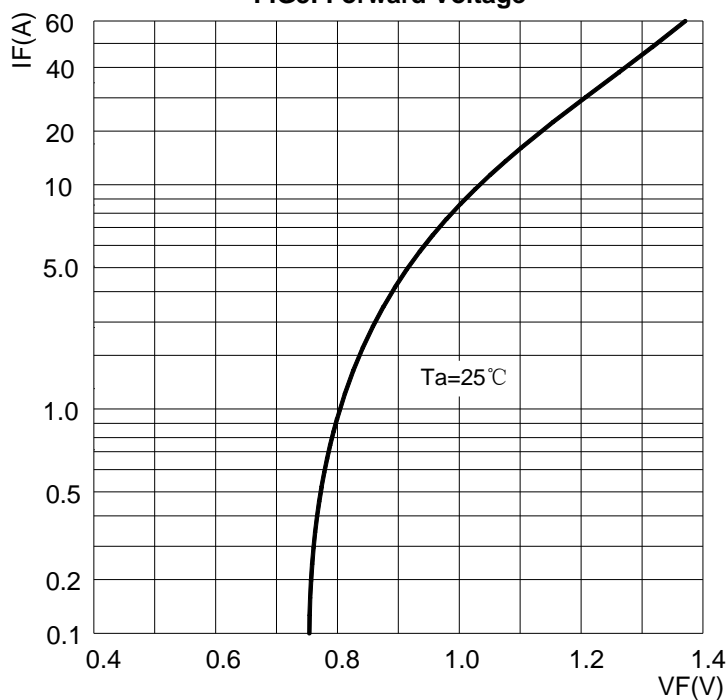


图4: 反向电流曲线  
FIG4: Typical Reverse Characteristics

