

Bridge Rectifier

■ 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 $T_c=100^\circ\text{C}$ | | | | | | |
| | | | 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 | A^2s | 1ms $\leq t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$, 单个二极管 1ms $\leq t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$, 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 | Tor | $\text{kg} \cdot \text{cm}$ | 推荐值: 5kg · cm Recommend torque: 5kg · 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} | μA | $V_{RM}=V_{RRM}$, 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 | $R_{\theta J-A}$ | $^\circ\text{C/W}$ | 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 |

■ 特性曲线 (典型) Characteristics(Typical)

图1: Io-Tc 曲线
FIG1:Io-Tc Curve

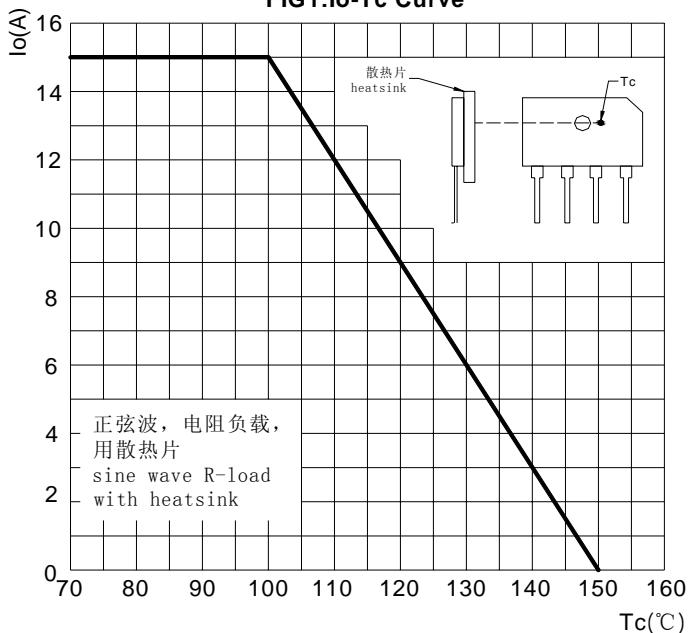


图2: 耐正向浪涌电流曲线
FIG2:Surge Forward Current Capability

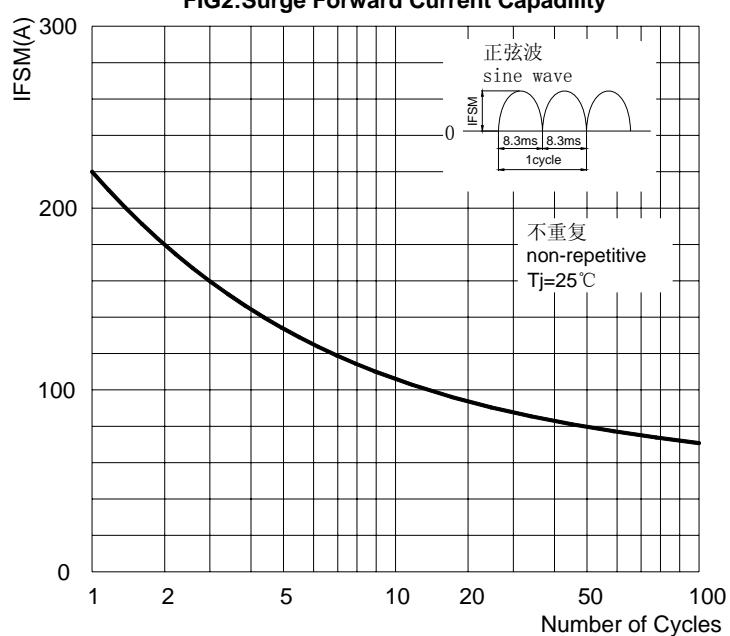


图3: 正向电压曲线
FIG3: Forward Voltage

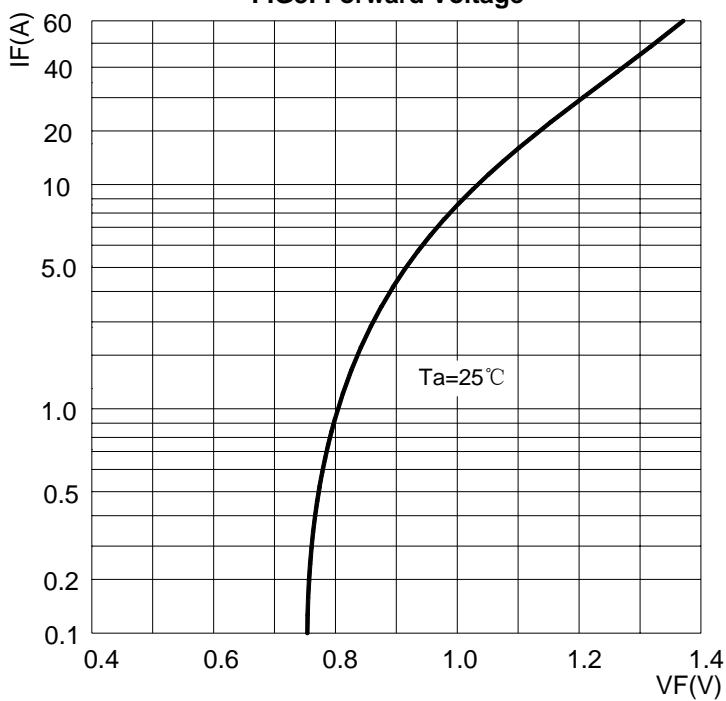


图4: 反向电流曲线
FIG4:Typical Reverse Characteristics

