

Glass Passivated Bridge Rectifiers
玻璃钝化整流桥

Reverse Voltage - 50 to 1000 Volts
反向电压 50-1000V
Forward Current - 50 Amperes
正向电流 50A

Features 特征

- Glass passivated chip 玻璃钝化芯片
- Low forward voltage drop 正向压降低

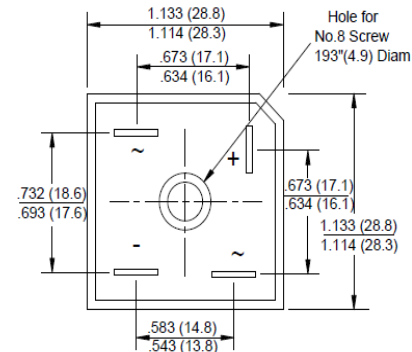
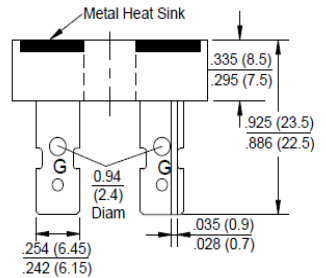
Mechanical Data 外观信息

- Polarity: Symbol marked on body 极性: 标志在产品的本体上
- Mounting position: Any 安装位置: 任何位置

Applications 应用

- General purpose use in AC/DC bridge full wave rectification, for home appliances, office equipment, etc.
一般应用于交流/直流桥式全波整流, 如: 家用电器, 办公设备等。

GBPC



Package Outline Dimensions in Inches (Millimeters)

封装外观尺寸单位英寸(毫米)

Maximum Ratings and Electrical Characteristics 最大额定值及电气特性

Rating at 25°C ambient temperature unless otherwise specified. 环境温度25°C, 除非特别说明。
Single phase, half wave, 60Hz, resistive or inductive load. 单相半波, 60Hz, 阻性或感性负载。
For capacitive load, derate current by 20%. 对于电容性负载, 降低20%的额定电流。

| Characteristics 特性 | Symbol 符号 | GBPC 50005 | GBPC 5001 | GBPC 5002 | GBPC 5004 | GBPC 5006 | GBPC 5008 | GBPC 5010 | Unit 单位 |
|---|-------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|------------------|
| Maximum Repetitive Peak Reverse Voltage 最大重复峰值反向电压 | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage 最大有效反向电压 | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum Average Forward Rectified Current @T _c =55 °C 最大正向平均整流电流 | I _(AV) | 50 | | | | | | | A |
| Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) 8.3mS单一正弦半波叠加在额定负载上的浪涌能力 (JEDEC方法) | I _{FSM} | 450 | | | | | | | A |
| I ² t Rating for Fusing (t<8.3mS) 熔断额定值 (t<8.3mS) | I ² t | 664 | | | | | | | A ² s |
| Peak Forward Voltage per Diode at 25A DC 单个二极管在25A电流下的正向峰值电压 | V _F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current at Rated @T _J =25°C DC Blocking Voltage per Diode @T _J =125°C 单个二极管在额定直流电压下的最大反向直流电流 | I _R | 500 | | | | | | | μA |
| Operating Junction Temperature Range 结温工作范围 | T _J | -55 to +150 | | | | | | | °C |
| Storage Temperature Range 储存温度范围 | T _{STG} | -55 to +150 | | | | | | | °C |

Fig. 1 - Forward Current Derating Curve

图1 正向电流降额曲线

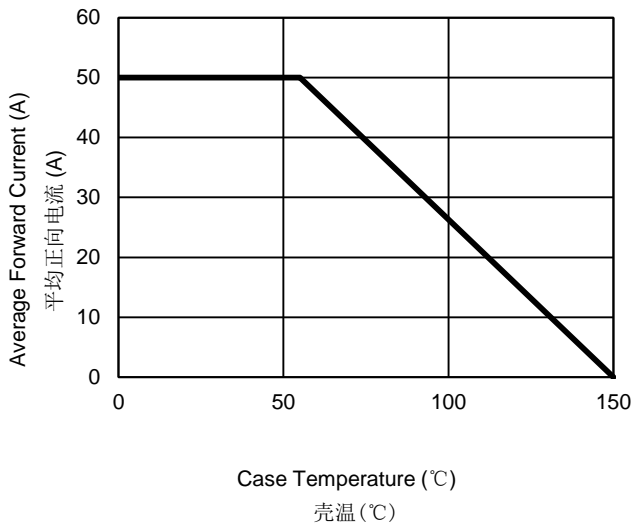


Fig. 2 - Maximum Non-Repetitive Surge Current

图2 最大不重复正向浪涌曲线

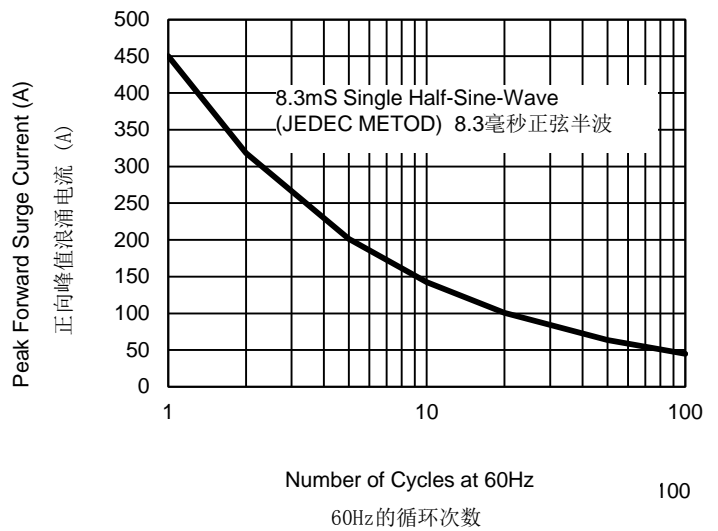


Fig. 3 - Typical Reverse Characteristics

图3 典型的反向特性

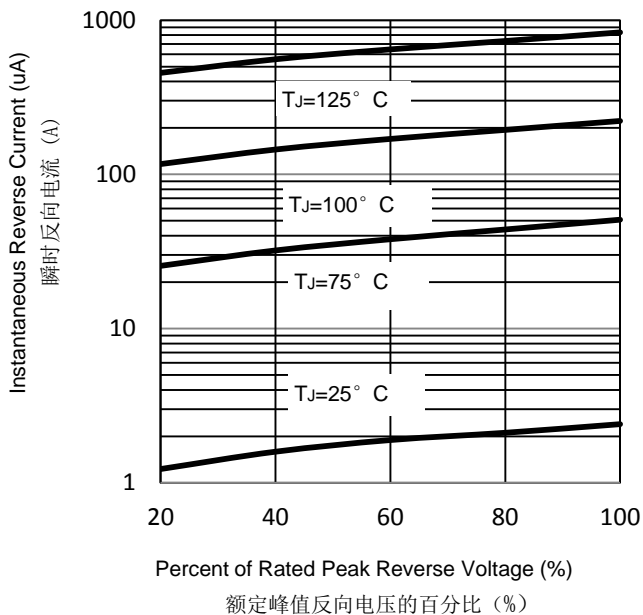
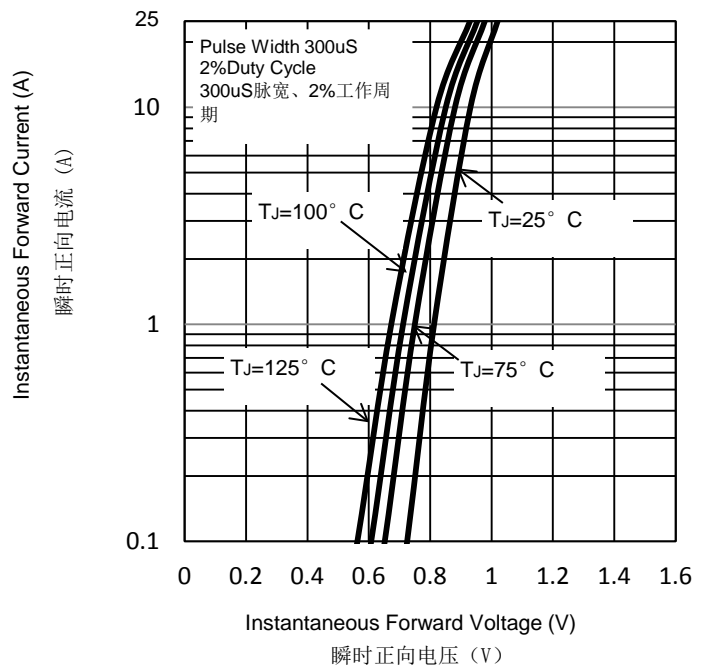


Fig. 4 - Typical Forward Characteristics

图4 典型的正向特性



The curve above is for reference only. 曲线图仅供参考。



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