

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 - 25 Amperes
正向电流 25A

Features 特征

- Glass passivated chip 玻璃钝化芯片
- Low forward voltage drop 正向压降低
- Ideal for printed circuit board 适用于印刷电路板中
- High surge current capability 高的浪涌能力

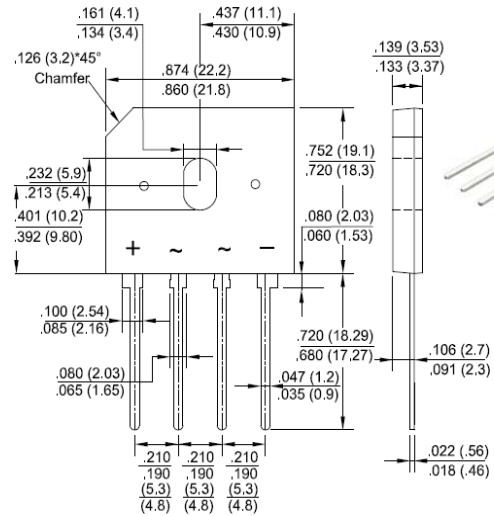
Mechanical Data 外观信息

- 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 SMPS, lighting ballaster, adapter, etc.
一般应用于交流/直流桥式全波整流, 如: 开关电源, 照明镇流器、适配器等。

GBU



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	GBU 25005	GBU 2501	GBU 2502	GBU 2504	GBU 2506	GBU 2508	GBU 2510	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 DC Blocking Voltage 最大直流阻断电压	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current (with heatsink Note 2) 最大正向平均整流电流 @ T _c =100°C (without heatsink)	I _(AV)	25.0 4.2							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}	350							A
I ² t Rating for Fusing (t<8.3ms) 熔断额定值 (t<8.3ms)	I ² t	508							A ² s
Peak Forward Voltage per Diode at 12.5A DC 单个二极管在12.5A电流下的正向峰值电压	V _F	1.0							V
Maximum DC Reverse Current at Rated @T _J =25°C DC Bolcking 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	5.0 500							μA
Typical Junction Capacitance per Diode (Note1) 典型结电容 (备注1)	C _J	70							pF
Typical Thermal Resistance to Ambient (Note2) 结到环境的典型热阻值 (备注2)	R _{θJA}	10							°C/W
Typical Thermal Resistance to case (Note2) 结到壳的典型热阻值 (备注2)	R _{θJC}	2							
Typical Thermal Resistance to lead (Note2) 结到引线的典型热阻值 (备注2)	R _{θJL}	2.2							
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

Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC. 在 1.0MHz 下和反向电压为 4.0V DC 下测试。

2. Device mounted on 100mm*100mm*1.6mm Cu plate heatsink. 安装在 100mm*100mm*1.6mm Cu 的散热片上。

3. The typical data above is for reference only(典型值仅供参考)。

Fig. 1 - Forward Current Derating Curve
图1 正向电流降额曲线

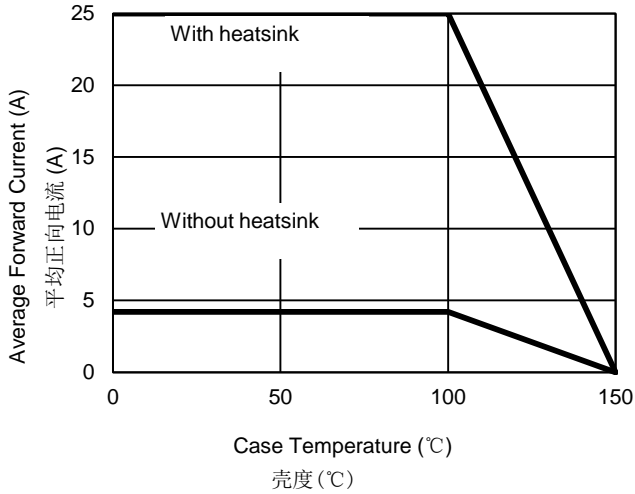


Fig. 2 - Maximum Non-Repetitive Surge Current
图2 最大不重复正向浪涌曲线

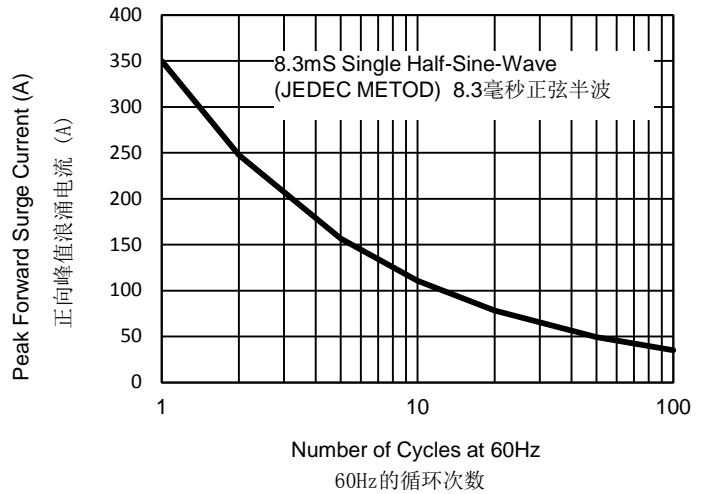


Fig. 3 - Typical Reverse Characteristics
图3 典型的反向特性

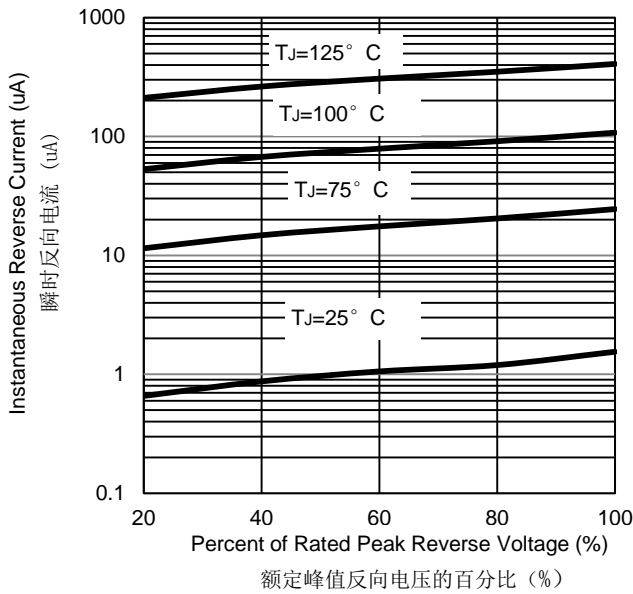
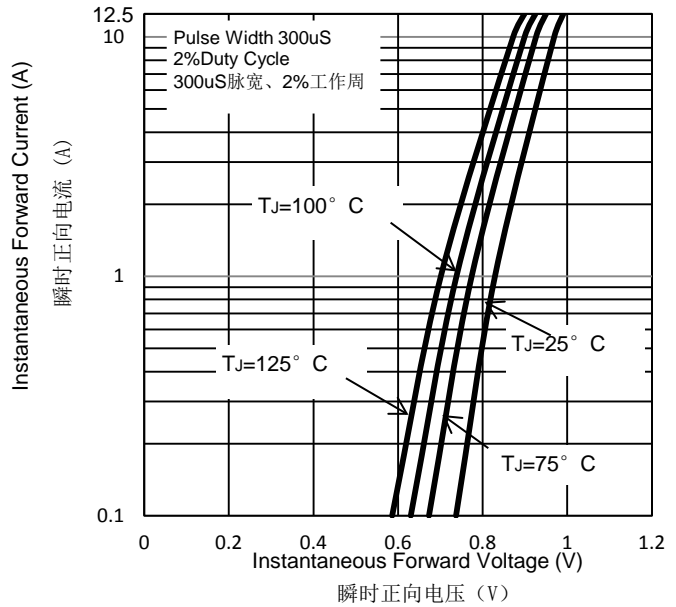


Fig. 4 - Typical Forward Characteristics
图4 典型的正向特性





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