

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 - 1.5 Amperes
正向电流 1.5A

Features 特征

- Glass passivated chip 玻璃钝化芯片
- High surge forward current capability 耐正向浪涌电流能力高
- Reliable low cost construction utilizing molded plastic technique
采用了低成本可靠的塑封技术
- Lead tin plated copper 铜引线镀锡

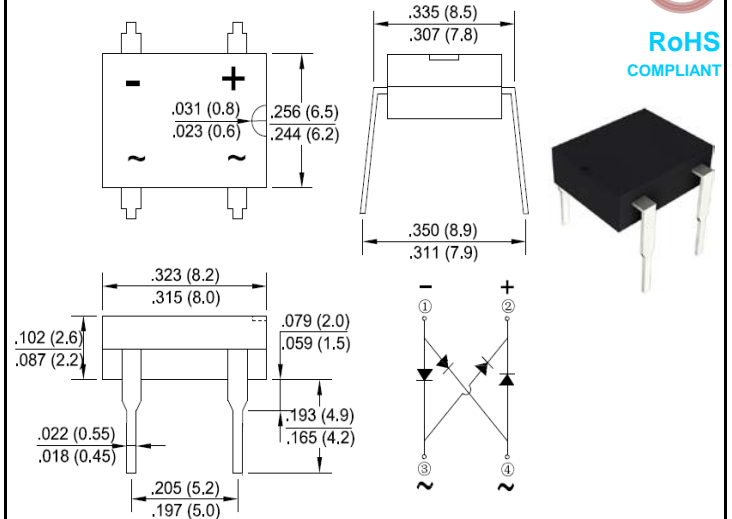
Mechanical Data 外观信息

- 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。

DF



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	DF 15005	DF 1501	DF 1502	DF 1504	DF 1506	DF 1508	DF 1510	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 @T _A =40°C (Note1) 最大正向平均整流电流 (备注1)	I _(AV)	1.5							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}	50							A
I ² t Rating for Fusing (t<8.3mS) 熔断额定值 (t<8.3mS)	I ² t	10.4							A ² s
Peak Forward Voltage per Diode at 1.5A DC 单个二极管在1.5A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	10							μA
Typical Junction Capacitance (Note1) 典型结电容 (备注1)	C _J	25							pF
Typical Thermal Resistance Junction to Ambient (Note2) 结到环境的典型热阻值 (备注2)	R _{θJA}	40							°C/W
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. Thermal resistance from junction to ambient mounted on P.C.B., with 0.5*0.5"(13*13mm) copper pads. 测量结到环境的热阻值是安装在13*13mm的铜的PCB板上。

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

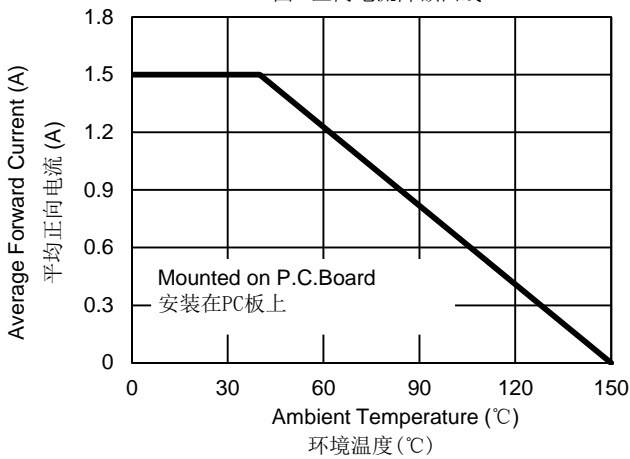


Fig. 2 - Maximum Non-Repetitive Surge Current

图2 最大不重复正向浪涌曲线

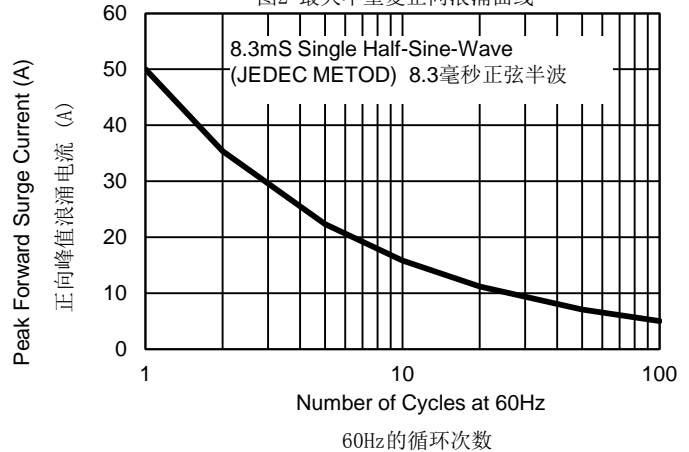


Fig. 3 - Typical Reverse Characteristics

图3 典型的反向特性

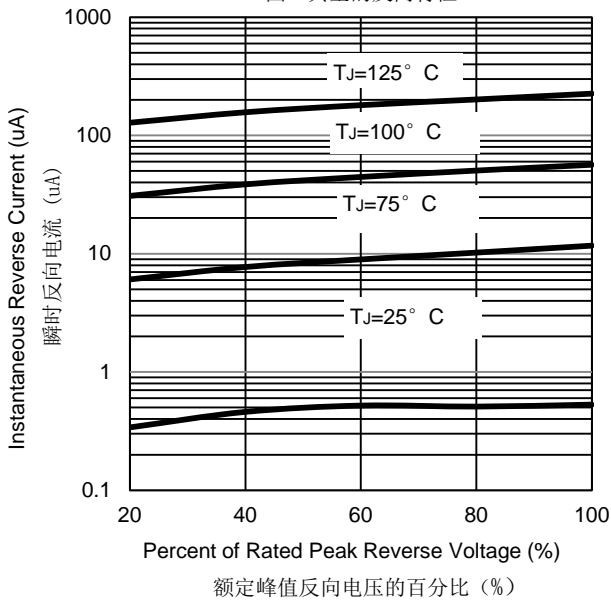


Fig. 4 - Typical Forward Characteristics

图4 典型的正向特性

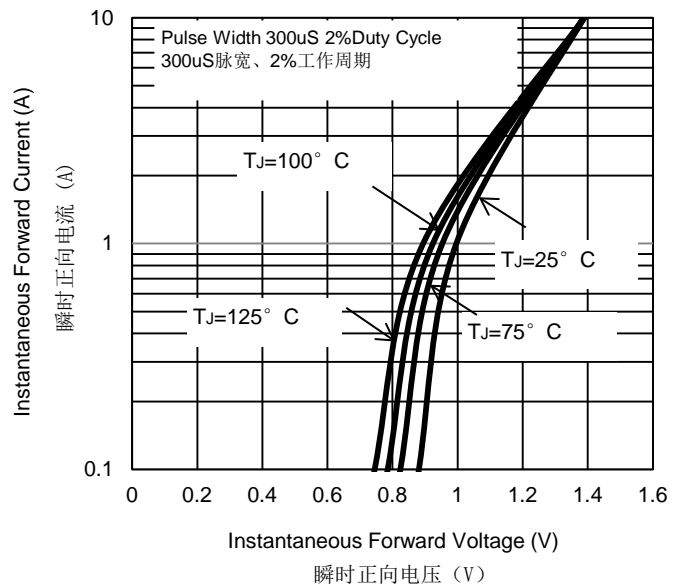
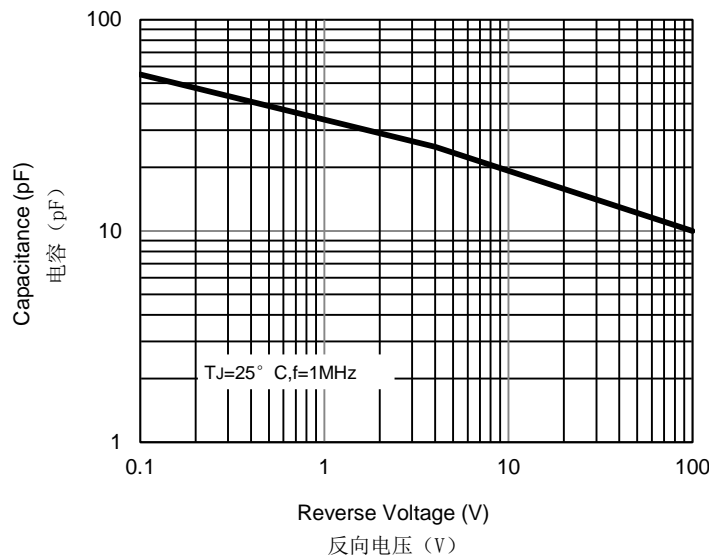


Fig. 5 - Typical Junction Capacitance

图5 典型的结电容



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



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