ABS105 THRU ABS110

Surface Mount Glass Passivated Bridge Rectifiers

贴片式玻璃钝化整流桥

Reverse Voltage - 50 to 1000 Volts 反向电压 50-1000V Forward Current - 1.0 Amperes 正向电流 1.0A

Features 特征

- Glass passivated chip 玻璃钝化芯片
- Ideal for automatic placement 适用于自动化贴放
- 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

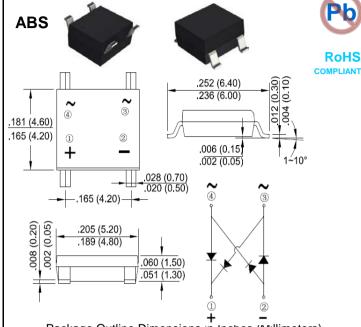
Mechanical Data 外观信息

- 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。



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℃ ambient temperature unless otherwise specified. 环境温度25℃,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。

| | | T | | | 1 | 1 | 1 | | |
|--------------------------------------------------------------|------------------|-------------|-------|-------|-------|-------|-------|------------------|------------|
| Characteristics 特性 | Symbol 符号 | ABS105 | ABS11 | ABS12 | ABS14 | ABS16 | ABS18 | ABS110 | Unit 单位 |
| Maximum Repetitive Peak Reverse Voltage | Vrrm | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| 最大重复峰值反向电压 | VKKIVI | | | | | | | | |
| Maximum RMS Voltage 最大有效反向电压 | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage 最大直流阻断电压 | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current @Ta=40 ℃(Note1) | Lavo | I(AV) 1.0 | | | | | | | А |
| 最大正向平均整流电流(备注1) | I(AV) | | | | | | | | |
| Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, | | | | | | | | | |
| Superimposed on Rated Load (JEDEC Method) | IFSM | IFSM 30 | | | | | | | А |
| 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 ² t Rating for Fusing (t<8.3mS) 熔断额定值 (t<8.3mS) | l ² t | 3.7 | | | | | | A ² s | |
| Peak Forward Voltage per Diode at 1.0A DC | VF | | | | 1 OF | 1.05 | | V | |
| 单个二极管在1.0A电流下的正向峰值电压 | VF | 1.05 | | | | | | | V |
| Maximum DC Reverse Current at Rated @TJ=25°C | | 5 IR 400 | | | | | | | μA |
| DC Blocking Voltage per Diode @Tյ=125℃ | lR | | | | | | | | |
| 单个二极管在额定直流电压下的最大反向直流电流 | | | | 100 | | | | | |
| Typical Thermal Resistance Junction to Ambient | Dour | 90 | | | | | | | °C /// |
| 结到环境的典型热阻值 | RθJA | Reja 80 | | | | | | | °C/W |
| Operating Junction Temperature Range 结温工作范围 | TJ | -55 to +150 | | | | | | | $^{\circ}$ |
| Storage Temperature Range 储存温度范围 | Tstg | -55 to +150 | | | | | | | $^{\circ}$ |
| Notes of Mounted on D.C. board 党独在DC纸上 | | - | | | | | | | |

Notes:1.Mounted on P.C. board. 安装在PC板上

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



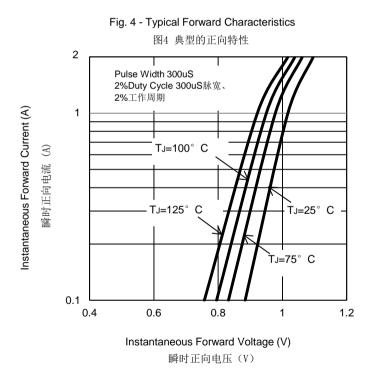
Fig. 1 - Forward Current Derating Curve 图1 正向电流降额曲线 1.2 1 0.8 Average Forward Current (A) 0.6 平均正向电流 (A) 0.4 0.2 0 30 60 90 120 150 Ambient Temperature (°C) 环境温度(℃)

图2 最大不重复正向浪涌曲线 35 30 Peak Forward Surge Current (A) 8.3mS Single Half-Sine-Wave 25 (A)(JEDEC METOD) 8.3毫秒正弦半波 正向峰值浪涌电流 20 15 10 5 0 10 100 Number of Cycles at 60Hz 60Hz的循环次数

Fig. 2 - Maximum Non-Repetitive Surge Current

Fig. 3 - Typical Reverse Characteristics 图3 典型的反向特性 1000 TJ=125° C 100 Instantaneous Reverse Current (uA) TJ=100C 瞬时反向电流 (nA) 10 T_J=75° C T_J=25° C 1 0.1 20 40 60 80 100 Percent of Rated Peak Reverse Voltage (%)

额定峰值反向电压的百分比(%)



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

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