

Plastic Silicon Rectifiers 硅整流器	Reverse Voltage - 50 to 1000Volts 反向电压 50-1000V Forward Current - 2.5 Amperes 正向电流 2.5A
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Features 特征

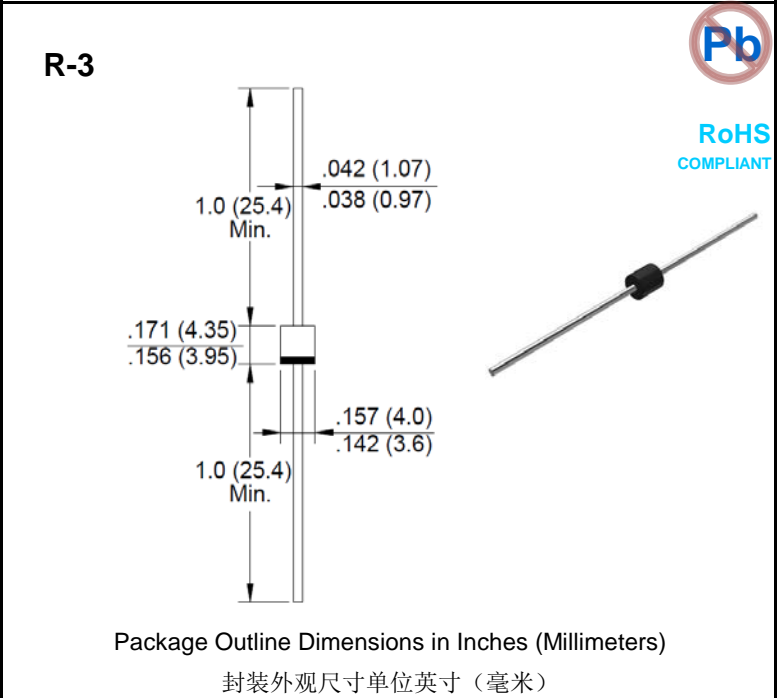
- Low cost 低成本
- Low reverse leakage current 反向漏电流小
- Low forward voltage drop 正向压降低
- High surge capacity 耐浪涌能力高
- Meet UL flammability classification 94V-0 符合UL 94V-0阻燃等级

Mechanical Data 外观信息

- Case: JEDEC R-3 molded plastic 封装: R-3 塑封
- Polarity: Color band denotes cathode 极性: 阴极色环标识
- Mounting position: Any 安装位置: 不限

Applications 应用

- For use in low voltage, high frequency inverters, polarity protection applications
应用于低压, 高频变换器, 极性保护



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	RL251	RL252	RL253	RL254	RL255	RL256	RL257	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 =70 °C 最大正向平均整流电流	I _(AV)	2.5							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}	90							A
I ² t Rating for Fusing (t<8.3ms) 熔断额定值 (t<8.3ms)	I ² t	33.6							A ² s
Peak Forward Voltage at 2.5A DC (Note1) 在2.5 A 电流下的正向峰值电压 (备注1)	V _F	1.1							V
Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =100°C 在额定直流电压下的最大反向直流电流	I _R	5.0							uA
Typical Junction Capacitance (Note 2) 典型结电容	C _J	25							pF
Typical Thermal Resistance Junction to Ambient 结到环境的典型热阻值	R _{θJA}	30							°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. 300uS pulse width, 2%duty cycle. 300uS脉宽, 2%占空比。
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC. 在1MHz, 4.0V条件下测试
 3. The typical data above is for reference only. 典型值仅供参考。

RL25*-A-99-00
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Fig. 1 - Forward Current Derating Curve

图1 正向电流降额曲线

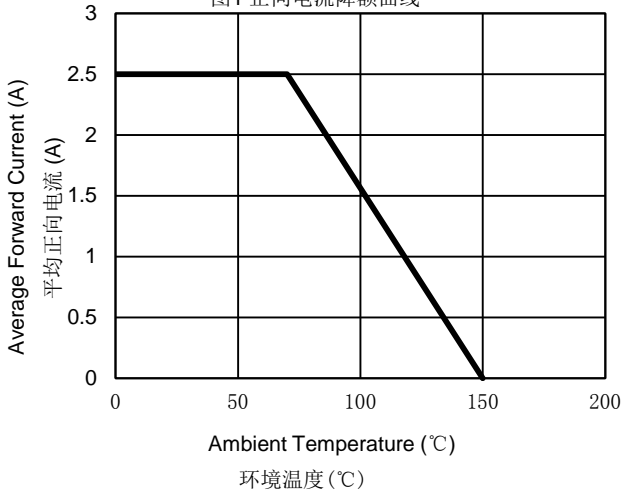


Fig. 2 - Maximum Non-Repetitive Surge Current

图2 最大不重复正向浪涌曲线

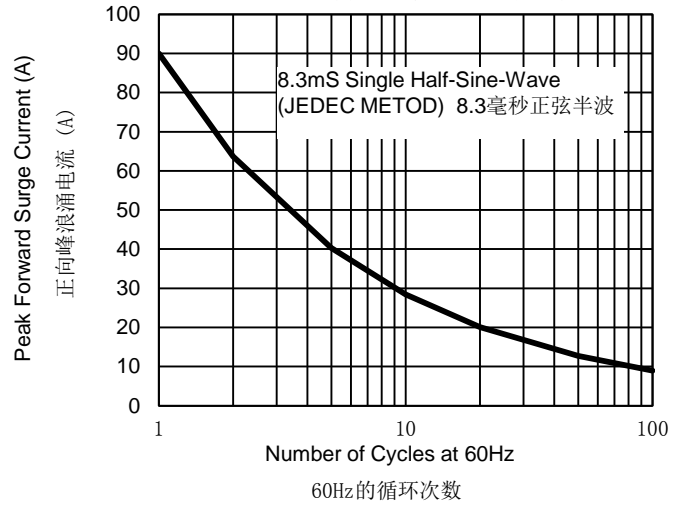


Fig. 3 - Typical Reverse Characteristics

图3 典型的反向特性

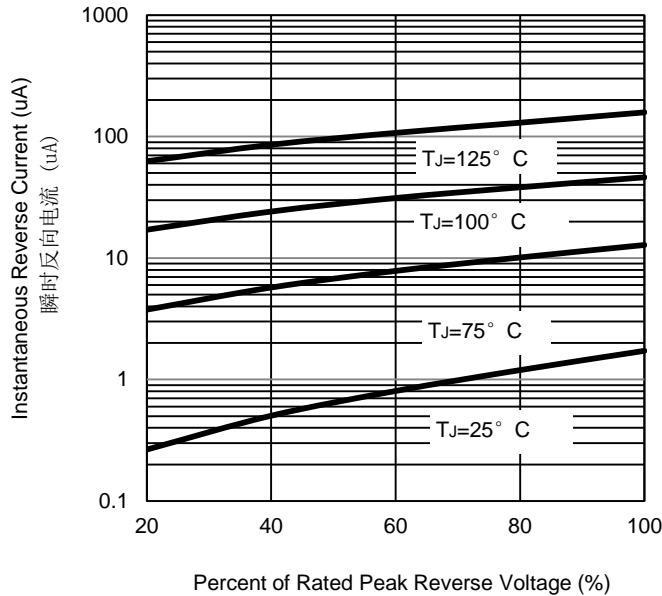


Fig. 4 - Typical Forward Characteristics

图4 典型的正向特性

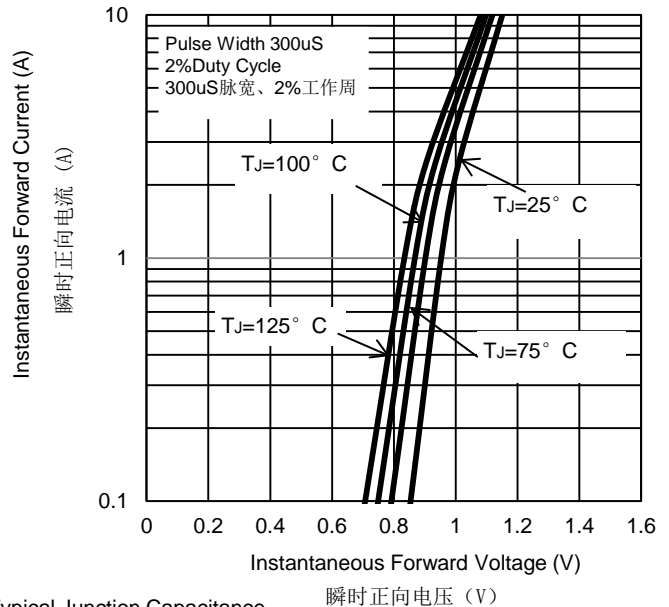
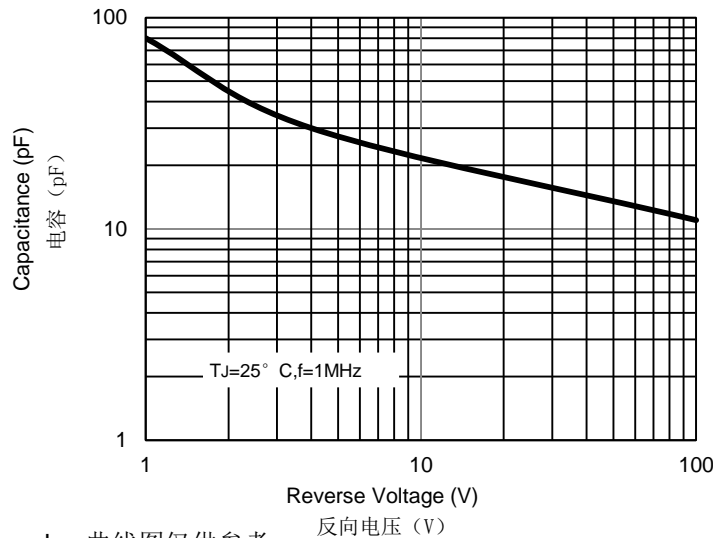


Fig. 5 - Typical Junction Capacitance

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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