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RL251G THRU RL257G

Glass Passivated Rectifiers
玻璃钝化整流器

Reverse Voltage - 50 to 1000Volts
反向电压 50-1000V
Forward Current - 2.5 Amperes
正向电流 2.5A

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

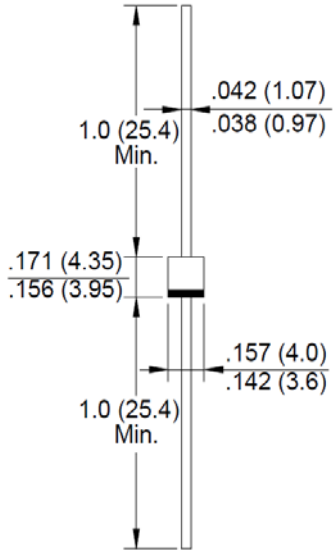
Mechanical Data 外观信息

- 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

R-3



Package Outline Dimensions in Inches (Millimeters)
封装外观尺寸单位英寸（毫米）

RoHS COMPLIANT

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。

Characteristics 特性	Symbol 符号	RL251G	RL252G	RL253G	RL254G	RL255G	RL256G	RL257G	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 ℃ 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^2t Rating for Fusing (t<8.3mS) 熔断额定值 （t＜8.3mS）	I^2t	33.6							A^2s
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℃	I_R	5.0							μA
at Rated DC Blocking Voltage @T_J=125℃ 在额定直流电压下的最大反向直流电流		200							
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	$R_{\theta JA}$	30							℃/W
Operating Junction Temperature Range 结温工作范围	T_J	-55 to +150							℃
Storage Temperature Range 储存温度范围	T_{STG}	-55 to +150							℃

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。

Fig. 1 - Forward Current Derating Curve

图1 正向电流降额曲线

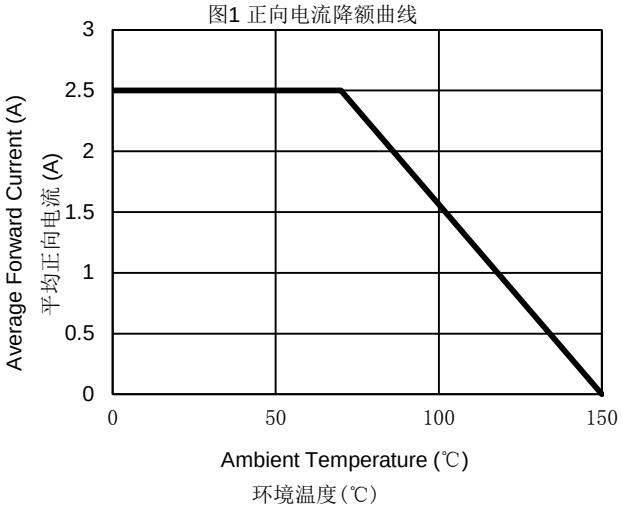


Fig. 2 - Maximum Non-Repetitive Surge Current

图2 最大不重复正向浪涌曲线

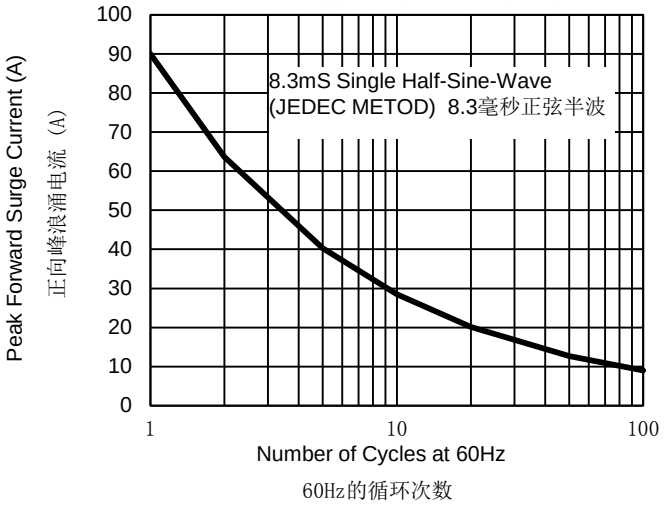


Fig. 3 - Typical Reverse Characteristics

图3 典型的反向特性

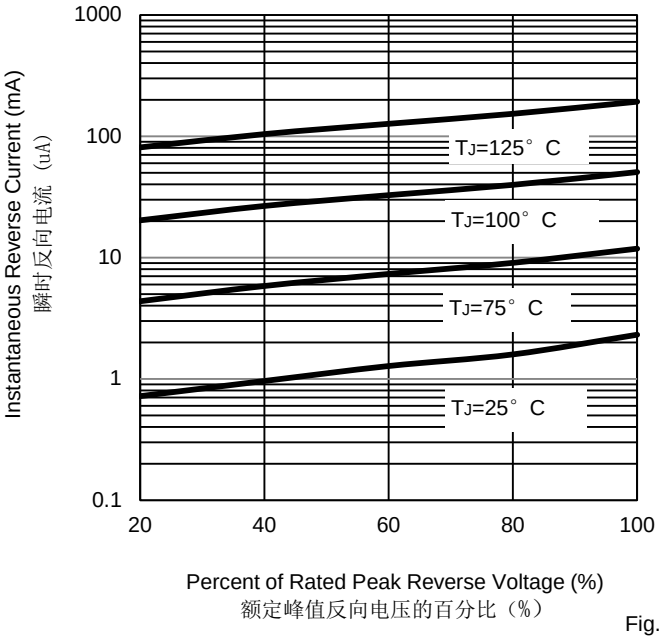


Fig. 4 - Typical Forward Characteristics

图4 典型的正向特性

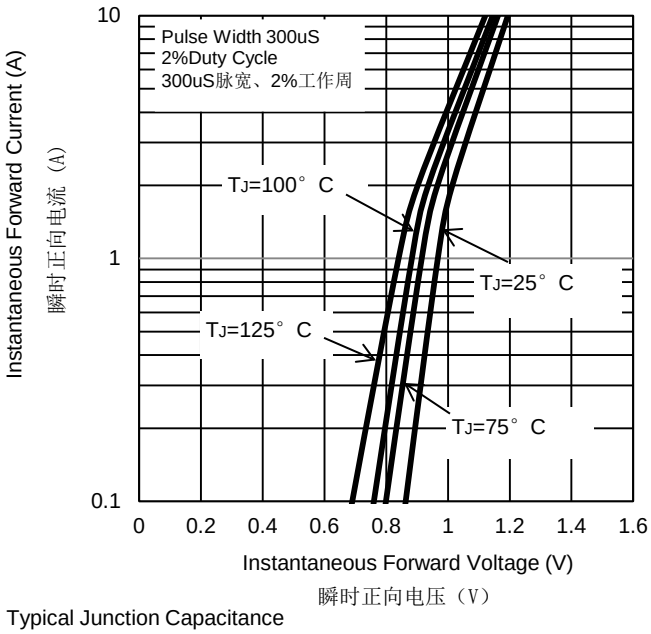
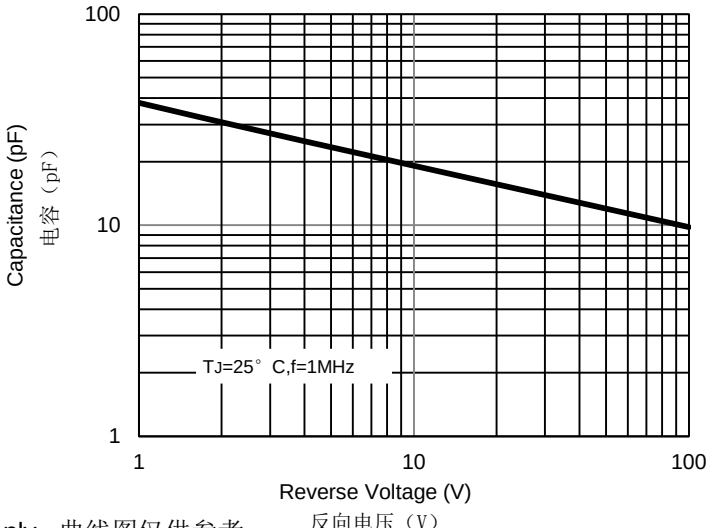


Fig. 5 - Typical Junction Capacitance

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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