

**Surface Mount Schottky Barrier Rectifiers**  
贴片式肖特基整流器

**Reverse Voltage - 20 to 100Volts**  
**反向电压 20-100V**  
**Forward Current - 1.0 Amperes**  
**正向电流 1.0A**

**Features 特征**

- Low power loss, high efficiency 低功耗, 高效率
- Ideal for automated placement 适用于自动安装放置
- Ultrafast reverse recovery time 超快反向恢复时间
- Low forward voltage drop 正向压降低
- High surge capacity 耐浪涌能力高

**Mechanical Data 外观信息**

- Case: JEDEC SOD-123FL molded plastic 封装: SOD123-FL塑封
- Polarity: Color band denotes cathode 极性: 阴极色环标识
- Mounting position: Any 安装位置: 不限

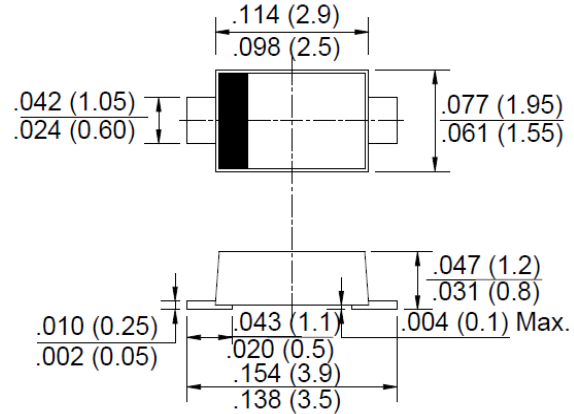
**Applications 应用**

- 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。

**SOD-123FL**



RoHS  
COMPLIANT



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	SS12L	SS13L	SS14L	SS15L	SS16L	SS18L	SS110L	Unit 单位
	Marking 标识	S12L	S13L	S14L	S15L	S16L	S18L	S110L	
Maximum Repetitive Peak Reverse Voltage 最大重复峰值反向电压	VRRM	20	30	40	50	60	80	100	V
Maximum RMS Voltage 最大有效反向电压	VRMS	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage 最大直流阻断电压	VDC	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current @TL=100 °C 最大正向平均整流电流	IAV	1.0							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)	IFSM	25							A
Peak Forward Voltage at 1.0A DC (Note1) 在1.0 A 电流下的正向峰值电压 (备注1)	VF	0.55			0.70		0.85		V
Maximum DC Reverse Current @Tj=25°C at Rated DC Blocking Voltage @Tj=100°C 在额定直流电压下的最大反向直流电流	IR	1.0 10							mA
Typical Thermal Resistance Junction to Ambient (Note2) 结到环境的典型热阻值 (备注2)	RθJA	88							°C/W
Junction Temperature Range 结温工作范围	TJ	-55 to+150							°C
Storage Temperature Range 储存温度范围	TSTG	-55 to+150							°C

Notes: 1. 300uS pulse width, 2%duty cycle. 300uS脉宽, 2%占空比。

2. Mounted on FR-4 PCB. With 0.9x1.5 mm copper pad areas (≈35 μm thick) 安装在FR-4电路板上, 焊盘大小为0.9mm\*1.5mm (厚度约35um)。

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

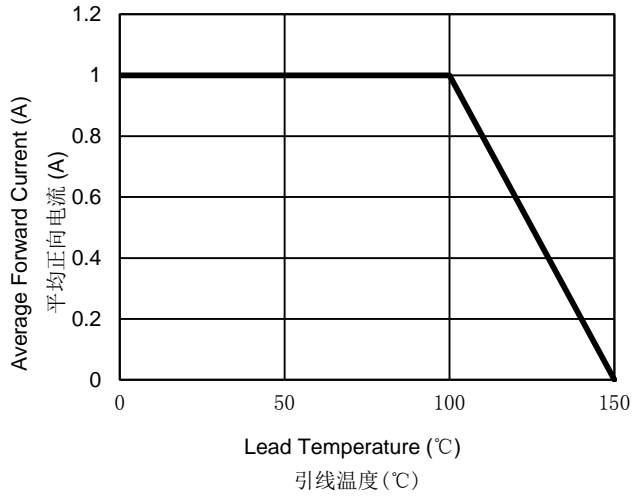


Fig. 2 - Maximum Non-Repetitive Surge Current

图2 最大不重复正向浪涌曲线

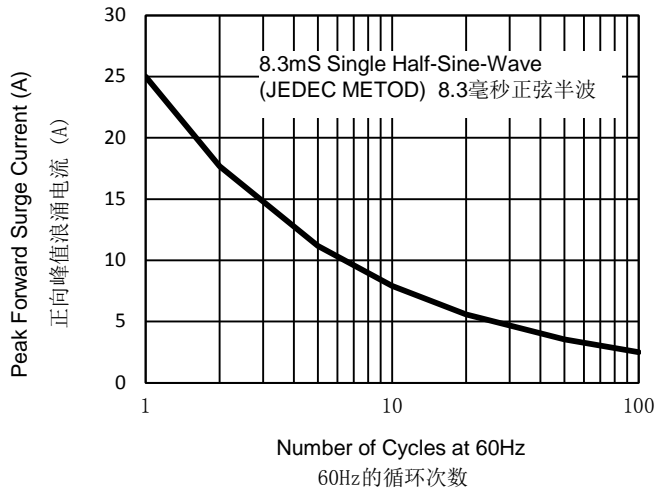


Fig. 3 - Typical Reverse Characteristics

图3 典型的反向特性

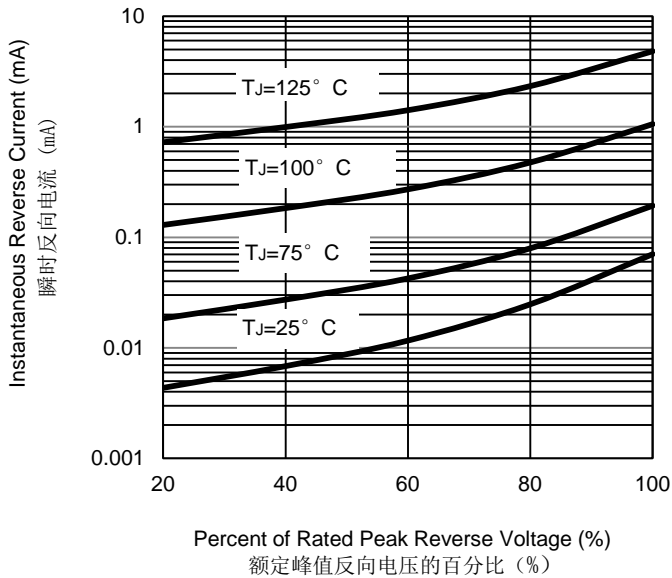


Fig. 4 - Typical Forward Characteristics

图4 典型的正向特性

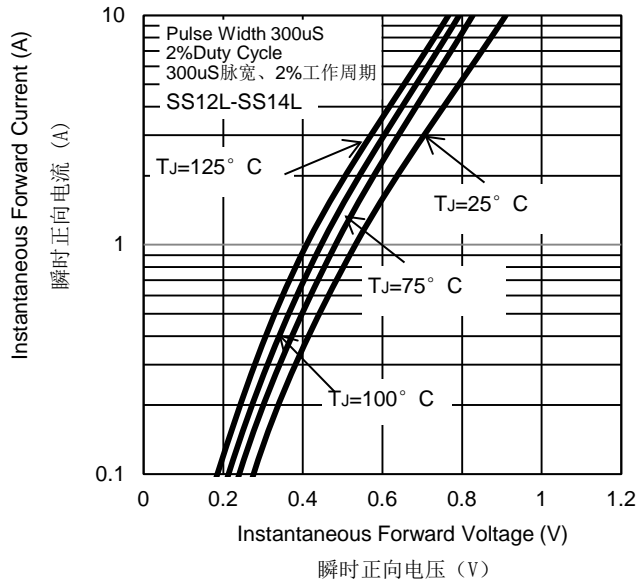


Fig. 5 - Typical Forward Characteristics

图5 典型的正向特性

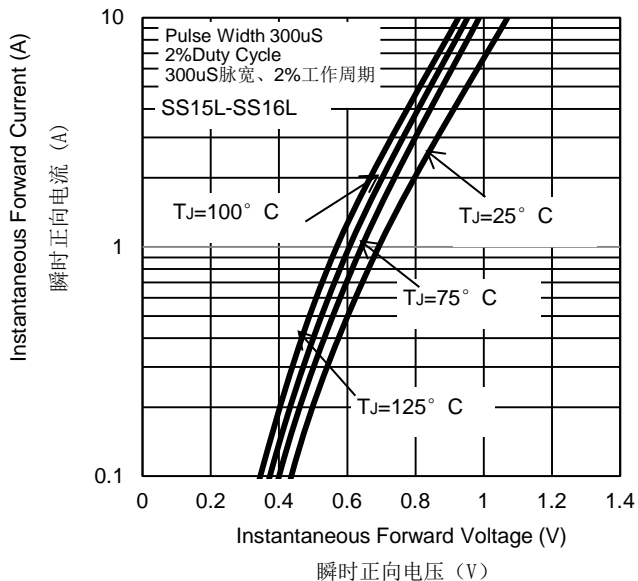
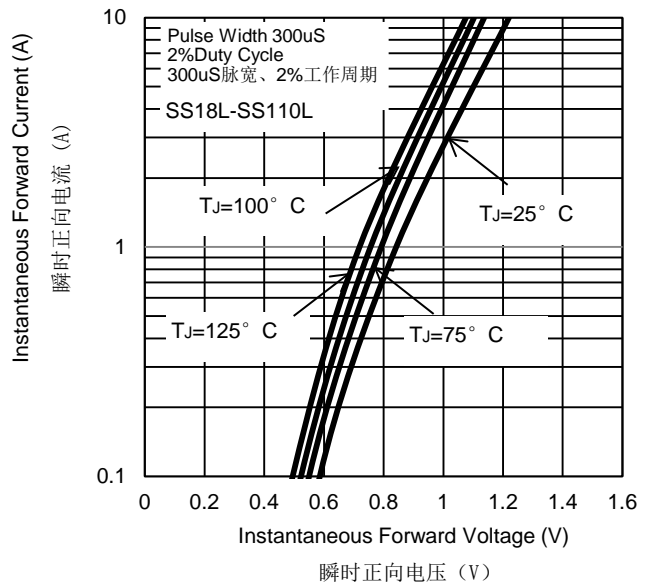


Fig. 6 - Typical Forward Characteristics

图6 典型的正向特性



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



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