

## 表面安装普通整流二极管

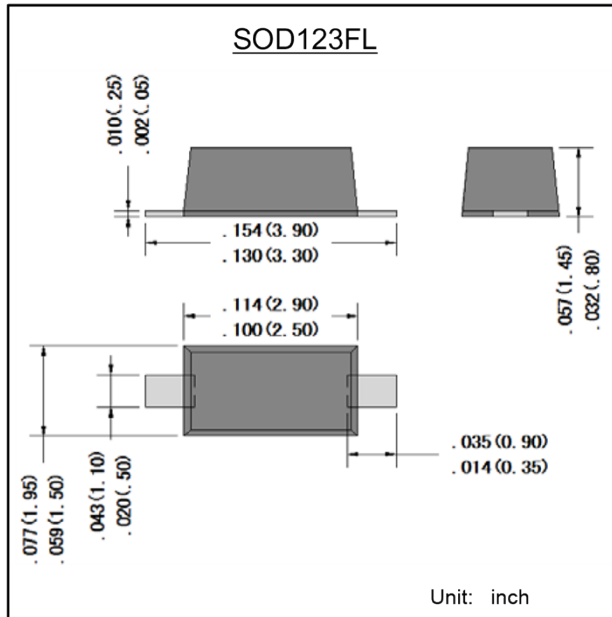
反向电压 50 ~ 1000 V

正向电流 1.0 A

## Surface Mounted General-purpose Rectifiers

Reverse Voltage 50 ~ 1000 V

Forward Current 1.0 A



### 特征 Features

- 玻璃钝化芯片 Glass passivated chip
- 反向漏电流低 Low reverse leakage
- 正向浪涌承受能力强 High forward surge capability
- 高信赖性 High reliability
- 高温焊接保证 High temperature soldering guaranteed:  
260°C/10 秒  
260°C/10seconds
- 引线 and 管体皆符合RoHS标准  
Lead and body according with RoHS standard
- 型号后缀“-F”标记无卤素产品  
Green compound with suffix "-F" on Marking

### 机械数据 Mechanical Data

- 封装外形:SOD123FL塑封Case:SOD123FL Molded plastic
- 环氧树脂:UL易燃等级:94V-0  
Epoxy: UL 94V-0 rate flame retardant
- 引脚:镀锡,无铅 Lead: Pure tin plated, lead free

### 极限值和温度特性 TA = 25°C 除非另有规定。

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

| 参数<br>Parameter                                                                                    | 符号<br>Symbols   | S1AL         | S1BL | S1DL | S1GL | S1JL | S1KL | S1ML | 单位<br>Unit |
|----------------------------------------------------------------------------------------------------|-----------------|--------------|------|------|------|------|------|------|------------|
| 最大可重复峰值反向电压<br>Maximum repetitive peak reverse voltage                                             | $V_{RRM}$       | 50           | 100  | 200  | 400  | 600  | 800  | 1000 | V          |
| 最大均方根电压 Maximum RMS voltage                                                                        | $V_{RMS}$       | 35           | 70   | 140  | 280  | 420  | 560  | 700  | V          |
| 最大直流阻断电压<br>Maximum DC blocking voltage                                                            | $V_{DC}$        | 50           | 100  | 200  | 400  | 600  | 800  | 1000 | V          |
| 最大正向平均整流电流<br>Maximum average forward rectified current                                            | $I_{F(AV)}$     | 1.0          |      |      |      |      |      |      | A          |
| 正向不重复浪涌电流 8.3 ms单一正弦半波<br>Non-repetitive peak forward surge current<br>8.3 ms singlehalf sine-wave | $I_{FSM}$       | 30           |      |      |      |      |      |      | A          |
| 典型热阻 Typical thermal resistance (Note 1)                                                           | $R_{\theta JA}$ | 180          |      |      |      |      |      |      | °C/W       |
| 工作结温<br>Operating junction temperature                                                             | $T_J$           | 150          |      |      |      |      |      |      | °C         |
| 存储温度<br>Storage temperature range                                                                  | $T_{STG}$       | -55 --- +150 |      |      |      |      |      |      | °C         |

备注 Note:

1) 安装在覆铜面积5.0毫米\*5.0毫米的PCB板上,从PN结到周围环境的热阻。

1) Thermal resistance from junction to ambient, PCB mounted with 5.0mm\*5.0mm Copper Pad Areas.

### 电特性 TA = 25°C 除非另有规定。

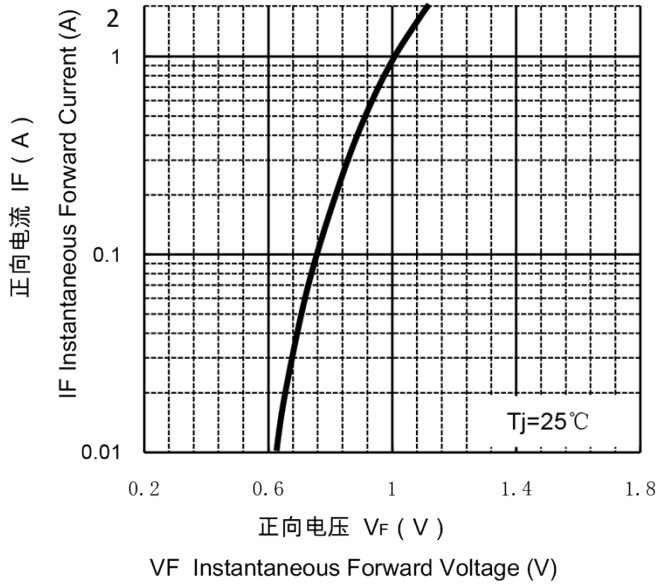
Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

| 参数<br>Parameter                                             | 符号<br>Symbols | S1AL | S1BL | S1DL | S1GL | S1JL | S1KL | S1ML | 单位<br>Unit |
|-------------------------------------------------------------|---------------|------|------|------|------|------|------|------|------------|
| 最大正向电压 @IF=1.0A<br>Maximum forward voltage                  | $V_F$         | 1.1  |      |      |      |      |      |      | V          |
| 最大反向电流 @V <sub>DC</sub> TA= 25°C<br>Maximum reverse current | $I_R$         | 5    |      |      |      |      |      |      | μA         |

## 特性曲线 Characteristic Curves

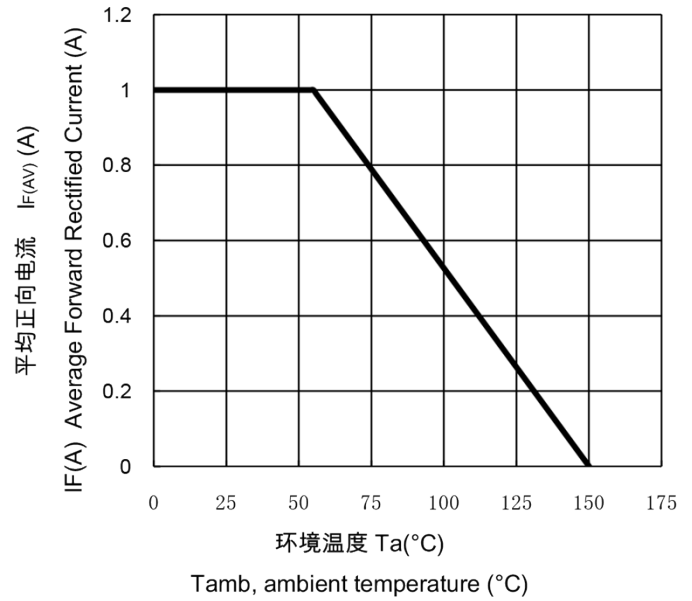
正向特性曲线 (典型值)

TYPICAL FORWARD CHARACTERISTIC



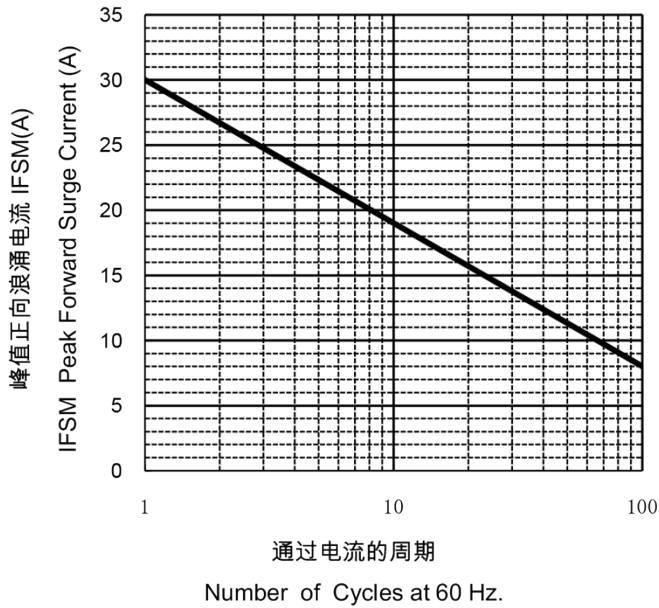
正向电流降额曲线

FORWARD CURRENT DERATING CURVE



浪涌特性曲线 (最大值)

MAXIMUM NON REPETITIVE  
PEAK FORWARD SURGE CURRENT



反向特性曲线

Typical Reverse Characteristics

