

## SMAF Schottky Barrier Rectifier Diode 肖特基势垒整流二极管

### ■ Features 特点

Low forward voltage drop 低正向压降

High current capability 高电流能力

Surface mount device 表面贴装器件

Case 封装:SMAF

**HF** **RoHS**



### ■ Maximum Rating 最大额定值

( $T_A=25^{\circ}\text{C}$  unless otherwise noted 如无特殊说明, 温度为  $25^{\circ}\text{C}$ )

| Characteristic<br>特性参数              | Symbol<br>符号    | SS52F<br>-6AF                      | SS53F<br>-6AF | SS54F<br>-6AF | SS55F<br>-6AF | SS56F<br>-6AF | SS58F<br>-6AF | SS59F<br>-6AF | SS510F<br>-6AF | Unit<br>单位                  |
|-------------------------------------|-----------------|------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|-----------------------------|
| Marking 印字                          |                 | SS52                               | SS53          | SS54          | SS55          | SS56          | SS58          | SS59          | SS510          |                             |
| Peak Reverse Voltage<br>反向峰值电压      | $V_{RRM}$       | 20                                 | 30            | 40            | 50            | 60            | 80            | 90            | 100            | V                           |
| DC Reverse Voltage<br>直流反向电压        | $V_R$           | 20                                 | 30            | 40            | 50            | 60            | 80            | 90            | 100            | V                           |
| RMS Reverse Voltage<br>反向电压均方根值     | $V_{R(RMS)}$    | 14                                 | 21            | 28            | 35            | 42            | 56            | 63            | 70             | V                           |
| Forward Rectified Current<br>正向整流电流 | $I_F$           | 5                                  |               |               |               |               |               |               |                | A                           |
| Peak Surge Current<br>峰值浪涌电流        | $I_{FSM}$       | 120                                |               |               |               |               |               |               |                | A                           |
| Thermal Resistance J-L<br>结到管脚热阻    | $R_{\theta JL}$ | 10                                 |               |               |               |               |               |               |                | $^{\circ}\text{C}/\text{W}$ |
| Junction Temperature<br>结温          | $T_J$           | 150                                |               |               |               |               |               |               |                | $^{\circ}\text{C}$          |
| Storage Temperature<br>储藏温度         | $T_{stg}$       | $-65\text{to}+150^{\circ}\text{C}$ |               |               |               |               |               |               |                | $^{\circ}\text{C}$          |

### ■ Electrical Characteristics 电特性

( $T_A=25^{\circ}\text{C}$  unless otherwise noted 如无特殊说明, 温度为  $25^{\circ}\text{C}$ )

| Characteristic<br>特性参数     | Symbol<br>符号                                         | SS52F-SS54F<br>-6AF | SS55F-SS56F<br>-6AF | SS58F-SS510F<br>-6AF | Unit<br>单位 | Condition<br>条件                      |
|----------------------------|------------------------------------------------------|---------------------|---------------------|----------------------|------------|--------------------------------------|
| Forward Voltage<br>正向电压    | $V_F$                                                | 0.55                | 0.70                | 0.85                 | V          | $I_F=5\text{A}$                      |
| Reverse Current<br>反向电流    | $I_R(25^{\circ}\text{C})$<br>$(100^{\circ}\text{C})$ | 0.1<br>5            |                     | 0.02<br>2            | mA         | $V_R=V_{RRM}$                        |
| Diode Capacitance<br>二极管电容 | $C_D$                                                | 380                 |                     |                      | pF         | $V_R=4\text{V}$ ,<br>$f=1\text{MHz}$ |

## ■ Typical Characteristic Curve 典型特性曲线

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

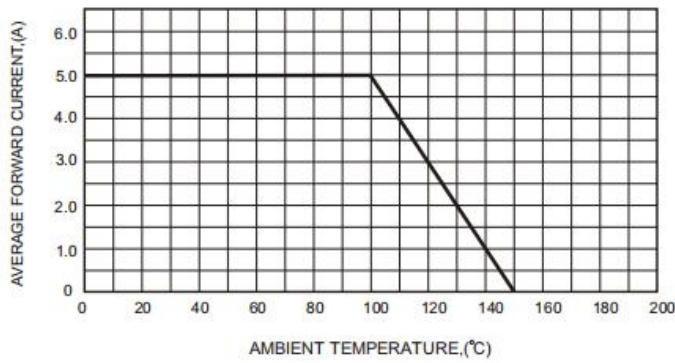


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

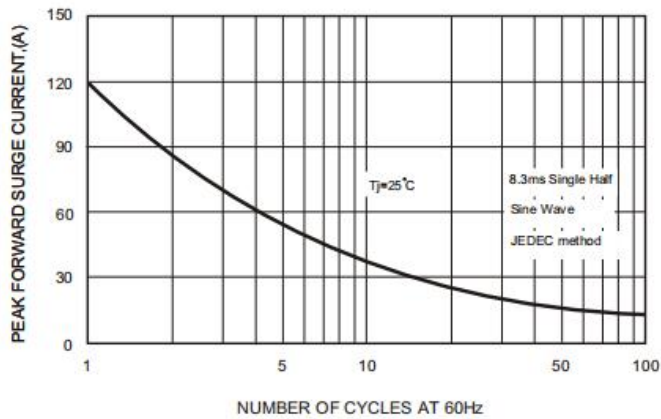


FIG.4-TYPICAL JUNCTION CAPACITANCE

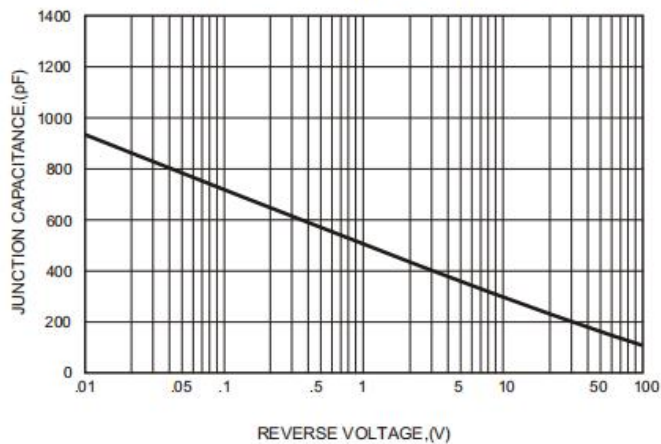


FIG.2-TYPICAL FORWARD CHARACTERISTICS

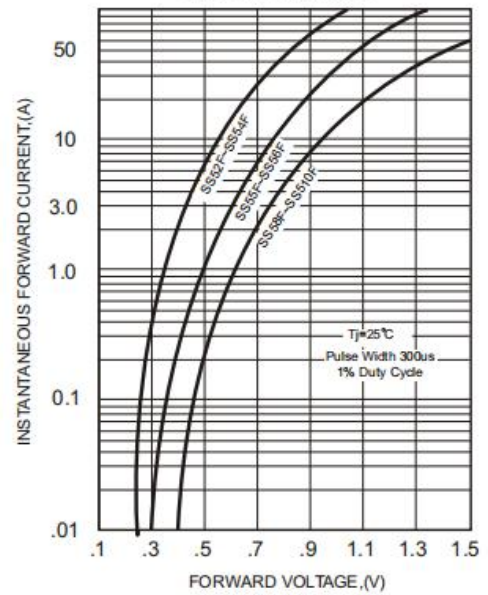
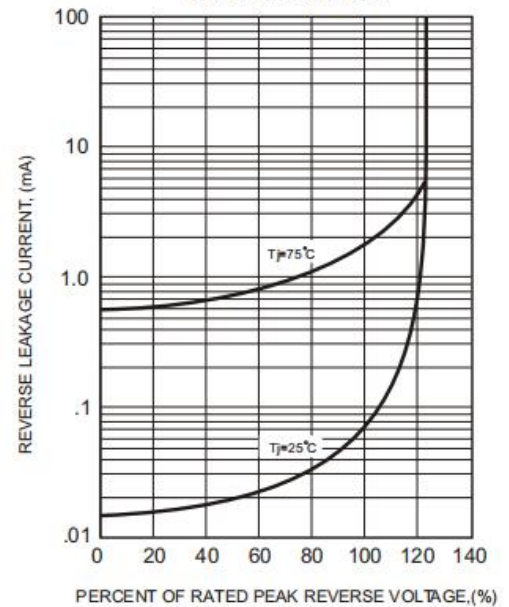
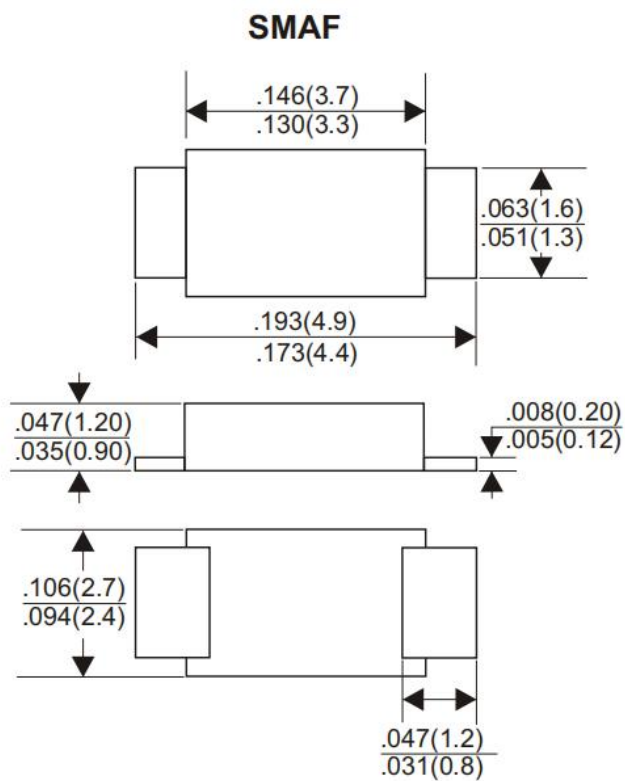


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



■Dimension 外形封装尺寸



Dimensions in inches and (millimeters)