



# 安徽富信半导体科技有限公司

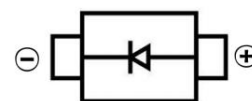
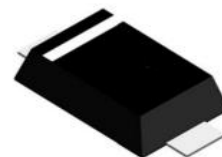
ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD.

M1F-M7F

## SMAF General Purpose Rectifier Diode 通用整流二极管

### ■ Features 特点

Low reverse leakage current 低反向漏电流  
 High surge current capability 高浪涌电流能力  
 Built-in strain relief 内应力释放  
 Surface mount device 表面贴装器件  
 Case 封装:SMAF



### ■ 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 特性参数	Symbol 符号	M1F	M2F	M3F	M4F	M5F	M6F	M7F	Unit 单位
Peak Reverse Voltage 反向峰值电压	$V_{RRM}$	50	100	200	400	600	800	1000	V
DC Reverse Voltage 直流反向电压	$V_R$	50	100	200	400	600	800	1000	V
RMS Reverse Voltage 反向电压均方根值	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Forward Rectified Current 正向整流电流	$I_F$	1							A
Peak Surge Current 峰值浪涌电流	$I_{FSM}$	30							A
Thermal Resistance J-A 结到环境热阻	$R_{\theta JA}$	83							$^{\circ}\text{C}/\text{W}$
Junction and Storage Temperature 结温和储藏温度	$T_J, T_{stg}$	150 $^{\circ}\text{C}$ , -55to+150 $^{\circ}\text{C}$							

### ■ 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 特性参数	Symbol 符号	Min 最小值	Typ 典型值	Max 最大值	Unit 单位	Test Condition 测试条件
Forward Voltage 正向电压	$V_F$		1.0	1.1	V	$I_F=1\text{A}$
Reverse Current( $T_A=25^{\circ}\text{C}/$ ) 反向电流( $T_A=100^{\circ}\text{C}/$ )	$I_R$			5 50	$\mu\text{A}$	$V_R=V_{RRM}$
Diode Capacitance 二极管电容	$C_D$		9		pF	$V_R=4\text{V}, f=1\text{MHz}$

## ■ Typical Characteristic Curve 典型特性曲线

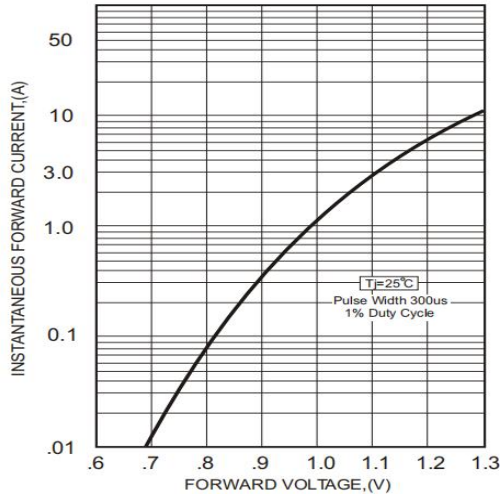


Figure 1: Forward Characteristics

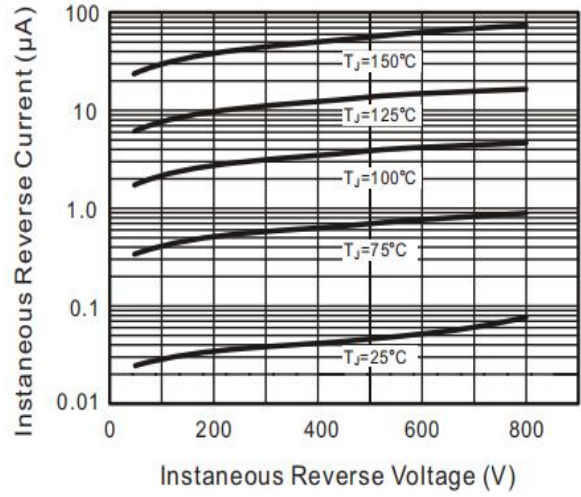


Figure 2: Reverse Characteristics

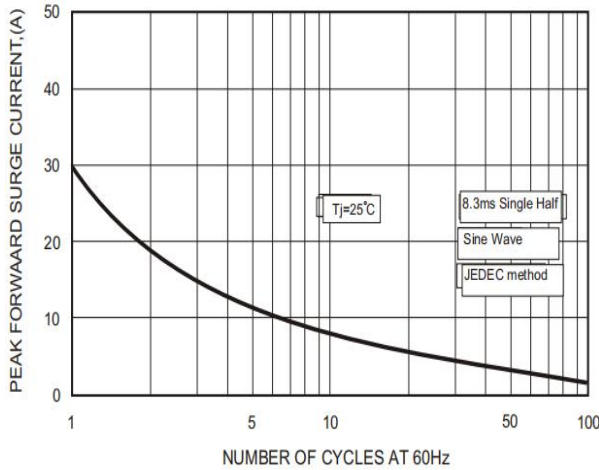


Figure 3: Surge Current Characteristics

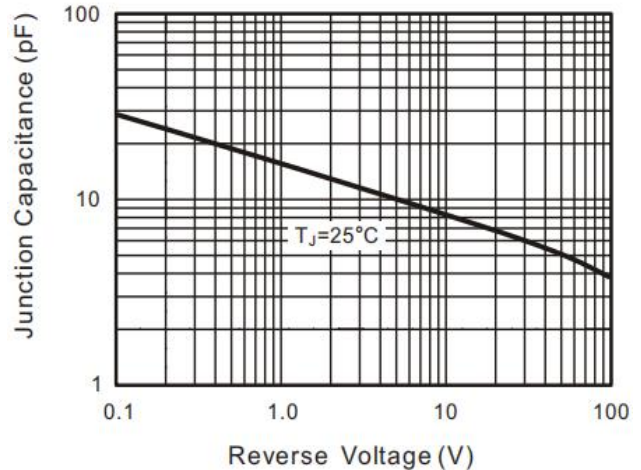


Figure 4: Junction Capacitance

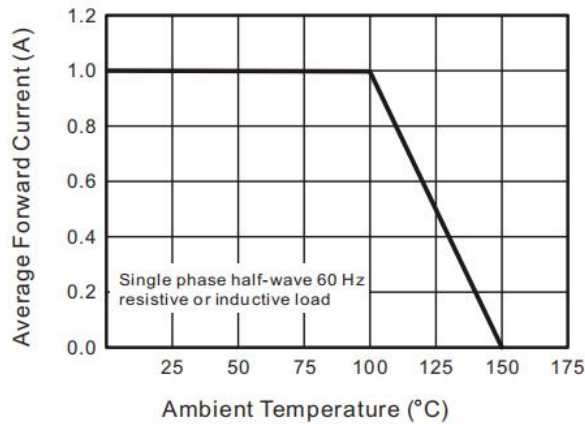
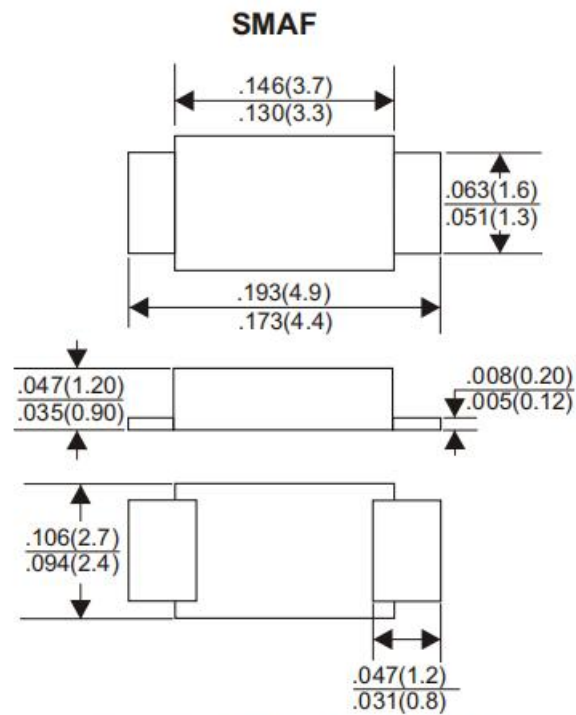


Figure 5: Forward Current Derating

## ■Dimension 外形封装尺寸



Dimensions in inches and (millimeters)