

## 塑封超快恢复整流二极管

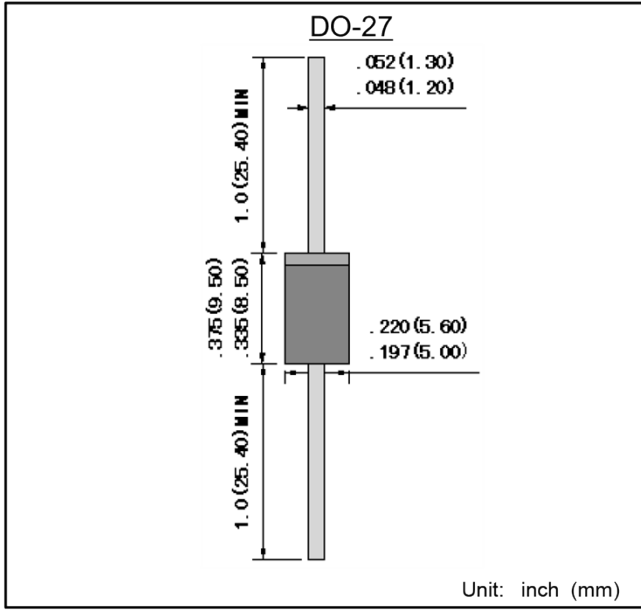
反向电压 50 ~ 600 V

正向电流 3.0 A

## Plastic Super Fast Recovery Rectifiers

Reverse Voltage 50 ~ 600 V

Forward Current 3.0 A



### 特征 Features

- 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
- 玻璃钝化芯片 Glass passivated chip
- 高温焊接保证 High temperature soldering guaranteed:  
260°C/10 秒, 引线长度:0.375" (9.5mm)  
260°C/10seconds,9.5mm lead length
- 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:DO-27 塑封 Case:DO-27 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 Parameter	符号 Symbols	SF 31G	SF 32G	SF 33G	SF 34G	SF 35G	SF 36G	SF 38G	单位 Unit
最大可重复峰值反向电压 Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	150	200	300	400	600	V
最大均方根电压 Maximum RMS voltage	$V_{RMS}$	35	70	105	140	210	280	420	V
最大直流阻断电压 Maximum DC blocking voltage	$V_{DC}$	50	100	150	200	300	400	600	V
最大正向平均整流电流 Maximum average forward rectified current	$I_{F(AV)}$	3.0							A
正向不重复浪涌电流 8.3 ms单一正弦半波 Non-repetitive peak forward surge current 8.3 ms single half sine-wave	$I_{FSM}$	125							A
典型热阻 Typical thermal resistance (Note 1)	$R_{\theta JA}$	35							°C/W
工作结温 Operating junction temperature	$T_J$	150							°C
存储温度 Storage temperature range	$T_{STG}$	-55 --- +150							°C

备注 Note:

1) 引线长度 0.375" (9.5 mm), 安装在PCB板上, 从PN结到周围环境的热阻。

1) Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, PCB mounted.

### 电特性 TA = 25°C 除非另有规定。

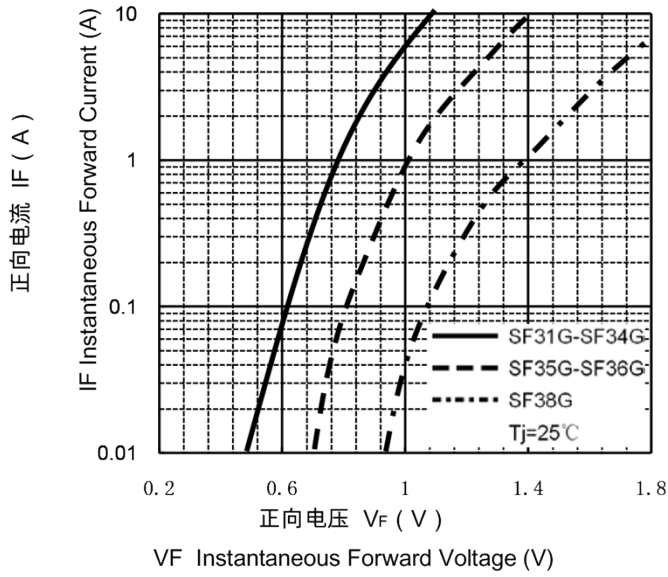
Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

参数 Parameter	符号 Symbols	SF 1G	SF 2G	SF 3G	SF 4G	SF 5G	SF 6G	SF 8G	单位 Unit
最大正向电压 @IF=3.0A Maximum forward voltage	$V_F$	0.95				1.25		1.70	V
最大反向电流 @V <sub>DC</sub> TA= 25°C Maximum reverse current	$I_R$	5							μA
最大反向恢复时间 IF=0.5A, IR=1.0A, IRR=0.25A MAX. reverse recovery time	$T_{rr}$	35							ns

特性曲线 Characteristic Curves

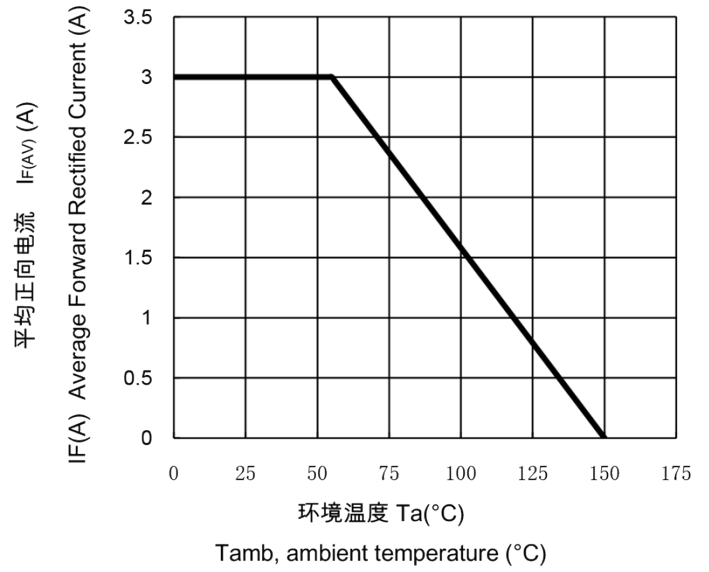
正向特性曲线 (典型值)

TYPICAL FORWARD CHARACTERISTIC



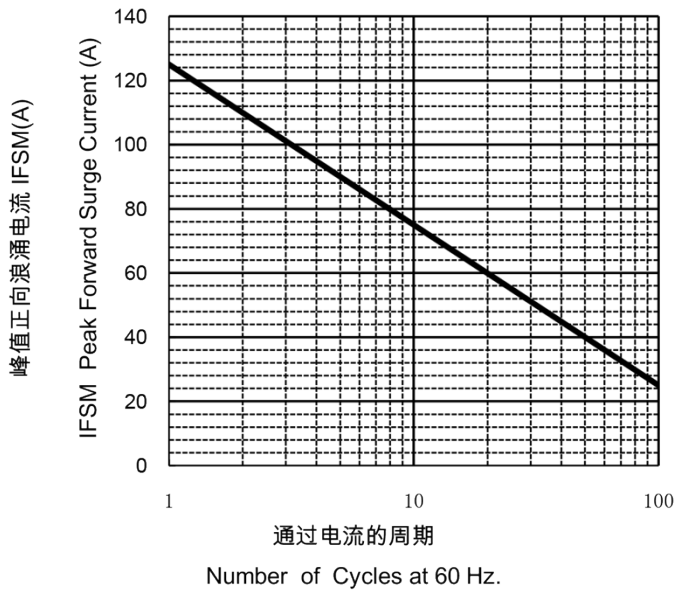
正向电流降额曲线

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

