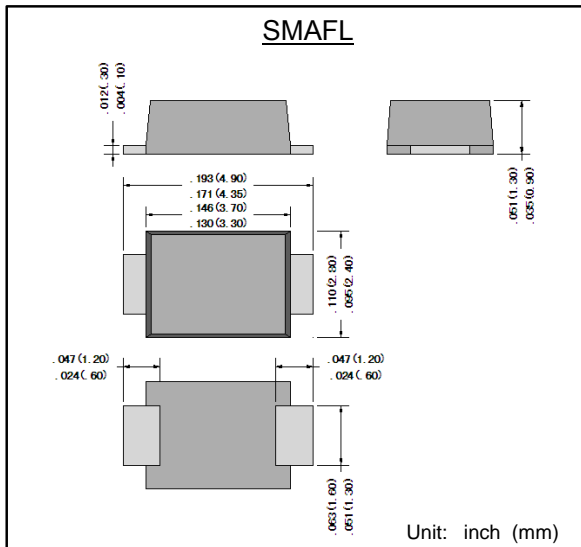




表面安装超快速整流二极管  
反向电压 50 ~ 1000 V  
正向电流 1.0 A

Surface Mount Super Fast Recovery Rectifiers  
Reverse Voltage 50 ~ 1000 V  
Forward Current 1.0 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 260°C/10seconds
- 引线 and 管体皆符合RoHS标准  
Lead and body according with RoHS standard

### 机械数据 Mechanical Data

- 封装外形:SMAFL 塑封 Case:SMAFL 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	US1A FA	US1B FA	US1D FA	US1G FA	US1J FA	US1K FA	US1M FA	单位 Unit
最大可重复峰值反向电压 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 Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
最大正向平均整流电流 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 Non-repetitive peak forward surge current 8.3 ms single half sine-wave	$I_{FSM}$	30							A
典型热阻 Typical thermal resistance (Note 1)	$R_{\theta JA}$	95							°C/W
工作结温和存储温度 Operating junction and storage temperature rang	$T_j, T_{STG}$	-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.

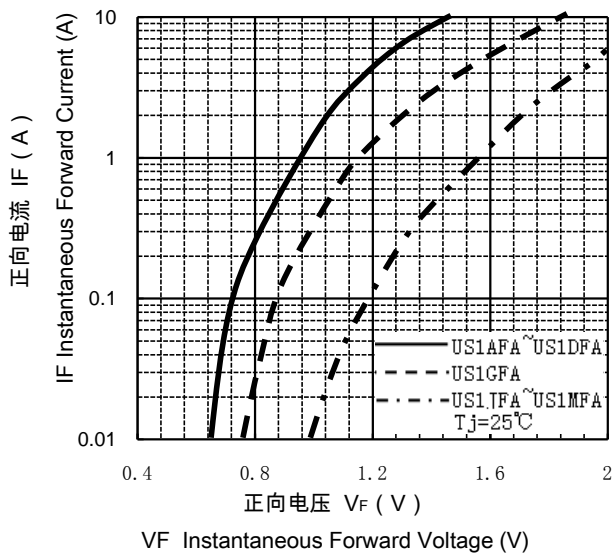
参数 Parameter	符号 Symbols	US1A FA	US1B FA	US1D FA	US1G FA	US1J FA	US1K FA	US1M FA	单位 Unit
最大正向电压 @ $I_F=1.0A$ Maximum forward voltage	$V_F$	1.0			1.3	1.7			V
最大反向电流 @ $V_{DC}$ TA= 25°C Maximum reverse current	$I_R$	5							μA
最大反向恢复时间 $I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$ MAX. reverse recovery time	$T_{rr}$	50				75			ns



## 特性曲线 Characteristic Curves

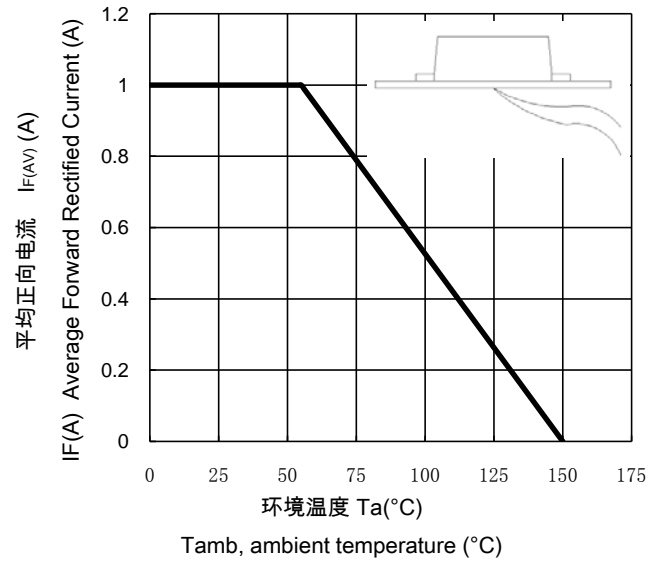
正向特性曲线 (典型值)

TYPICAL FORWARD CHARACTERISTIC



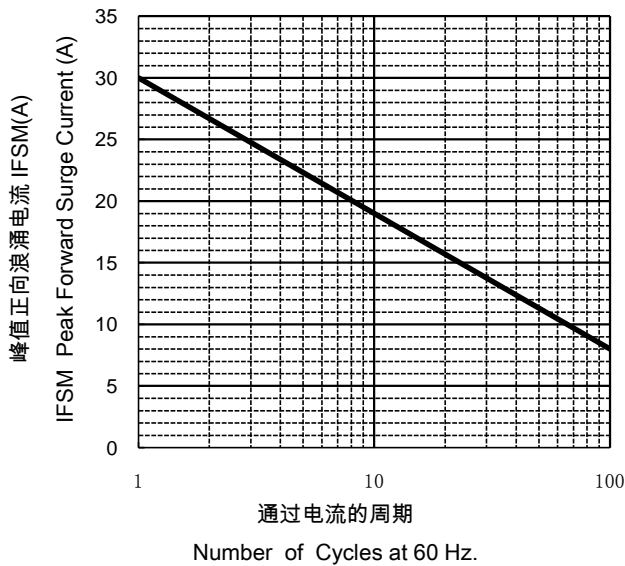
正向电流降额曲线

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

