

### 描述 / Descriptions

快恢复二极管，反向电压：50V~1000V，正向电流：3.0A，薄型 SMAF 封装。

Surface Mount Fast Recovery Rectifiers, Reverse Voltage : 50 to1000V,Forward Current:3.0A ,SMAF thin package.

### 特征 / Features

玻璃钝化芯片，无铅符合欧盟 RoHS 指令 2011/65/EU，适用表面贴装。无卤产品。

Glass Passivated Chip Junction, Lead free in comply with EU RoHS 2011/65/EU directives, For surface mounted applications. Halogen free product.

### 用途 / Applications

一般用途。

General purpose.

### 内部等效电路 / Equivalent Circuit

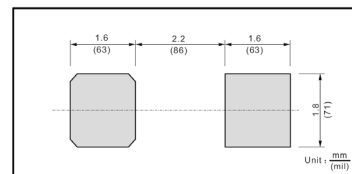


### 引脚排列 / Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



### 印章代码 / Marking

见印章说明。 See Marking Instructions.

**极限参数 / Absolute Maximum Ratings(Ta=25°C)**

参数 Parameter	符号 Symbol	数值 Rating							单位 Unit
		S3AF	S3BF	S3DF	S3GF	S3JF	S3KF	S3MF	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	90							A
Typical Junction Capacitance at VR=4V f=1MHz	$C_j$	45							pF
Typical Thermal Resistance <sup>1)</sup>	$R_{\theta JA}$	47							°C/W
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55~+150							°C

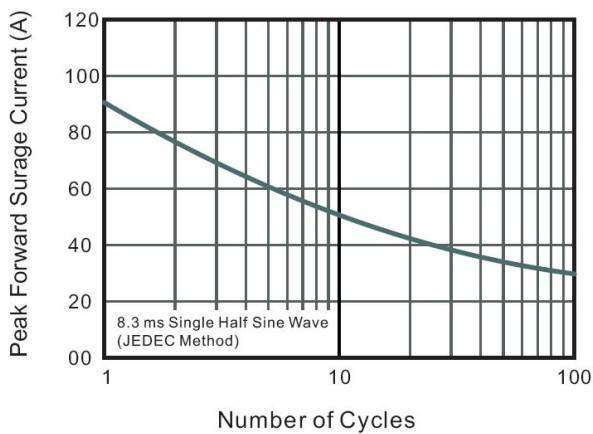
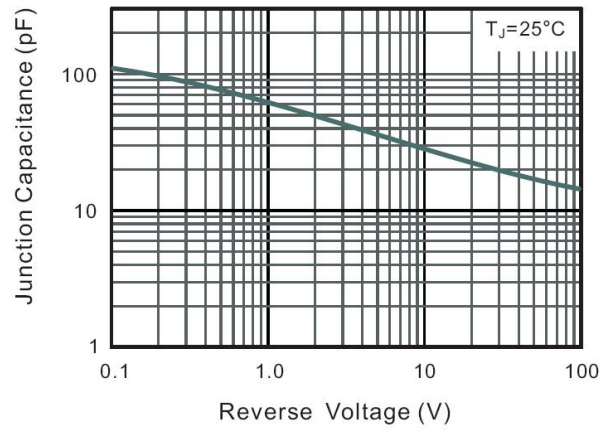
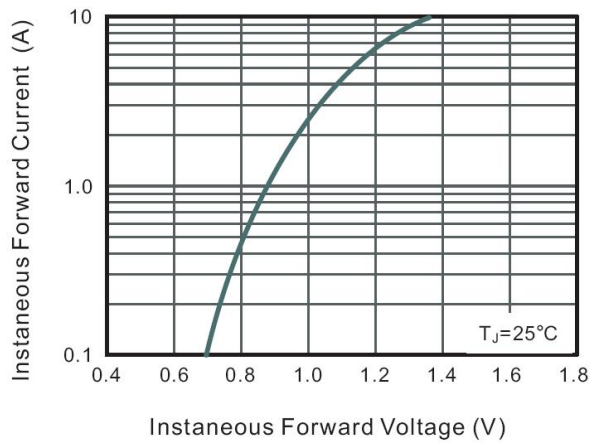
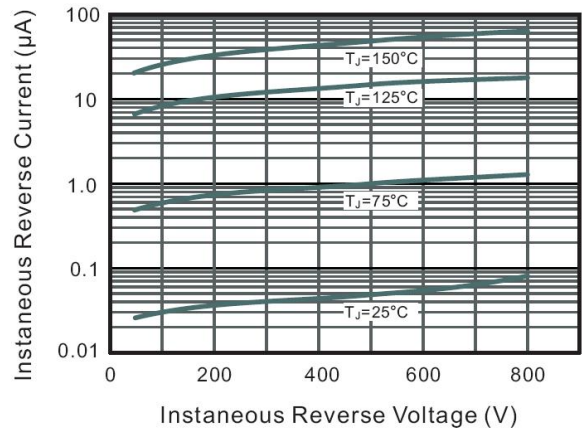
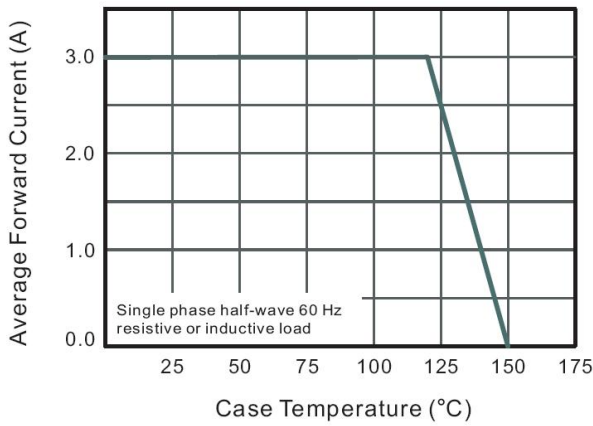
Note:

1) P.C.B. mounted with 1.0 X 1.0" (2.54 X 2.54 mm) copper pad areas.

**电性能参数 / Electrical Characteristics(Ta=25°C)**

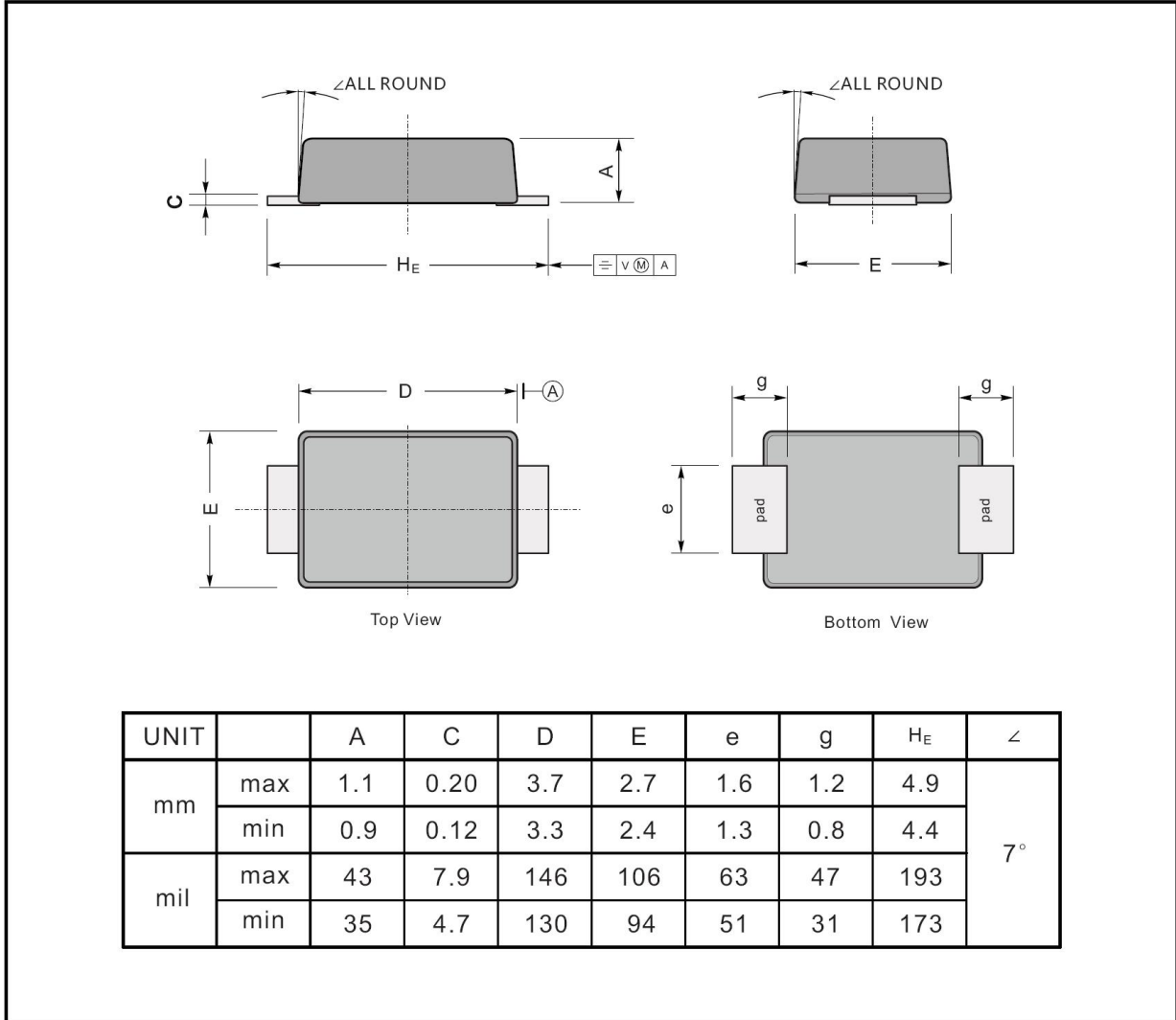
参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating							单位 Unit
			S3AF	S3BF	S3DF	S3GF	S3JF	S3KF	S3MF	
Maximum Instantaneous Forward Voltage	$V_F$	$I_F=3.0A$	1.2							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_a=25^\circ C$	5.0							$\mu A$
		$T_a=125^\circ C$	125							$\mu A$

电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions

SMAF



## Marking

Type number	Marking code
S3AF	S3A
S3BF	S3B
S3DF	S3D
S3GF	S3G
S3JF	S3J
S3KF	S3K
S3MF	S3M

**回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)**



说明：

- 1、预热温度 25 ~ 150°C，时间 60 ~ 90sec;
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2 ~ 10°C/sec.

Note:

- 1.Preheating:25~150°C, Time:60~90sec.
- 2.Peak Temp.:245±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

**耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions**

温度：260±5°C

时间：10±1 sec.

Temp.:260±5°C

Time:10±1 sec

**包装规格 / Packaging SPEC.**

卷盘包装 / REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SMAF	3000	5	15000	5	75000	7" ×11	185X180X105	550X210X220

**使用说明 / Notices**