

### 描述 / Descriptions

表面贴装肖特基整流二极管，反向电压：100V，正向电流：5.0A，薄型 SMAF 封装。  
Surface Mount Schottky Barrier Rectifier, Reverse Voltage: 100V, Forward Current: 5.0A, SMAF thin package.

### 特征 / Features

低功耗，高效率，正向浪涌电流大，适用于低压高频逆变器和极性保护，表面贴装，无卤产品。  
Low power loss, high efficiency, High forward surge current capability, For use in low voltage, high frequency inverters, and polarity protection applications, For surface mounted applications, HF Product.

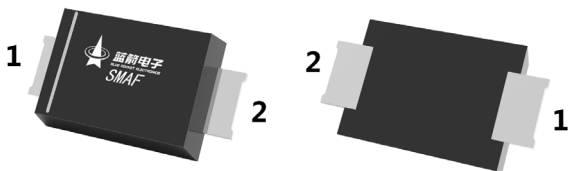
### 用途 / Applications

一般用途。  
General purpose.

### 内部等效电路 / Equivalent Circuit

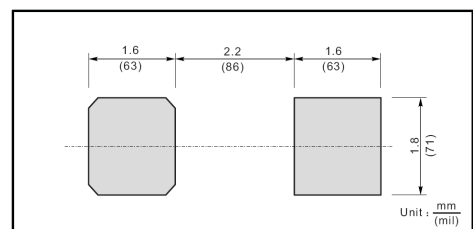


### 引脚排列 / Pinning



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
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	100	V
Maximum RMS voltage	V <sub>RMS</sub>	70	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	100	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	5.0	A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	150	A
Typical Junction Capacitance <sup>1)</sup>	C <sub>i</sub>	400	pF
Typical Thermal Resistance <sup>2)</sup>	R <sub>θJA</sub>	60	°C/W
Operating Junction Temperature Range	T <sub>j</sub>	-55~150	°C
Storage Temperature Range	T <sub>stg</sub>	-55~150	°C

Note:

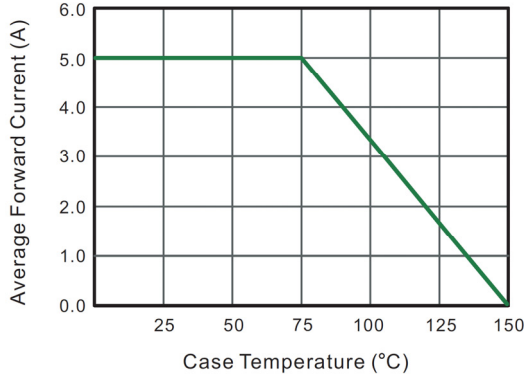
- 1) Measured at 1 MHz and applied reverse voltage of 4 V D.C.
- 2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

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

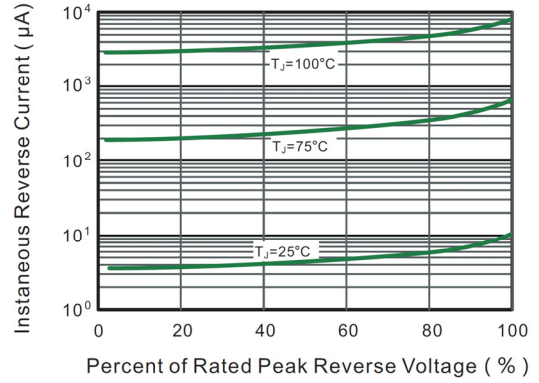
参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating	单位 Unit
Max Instantaneous Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =5.0A	0.6	V
Maximum DC Reverse Current at Rated DC Reverse Voltage	I <sub>R</sub>	T <sub>a</sub> =25°C	1.0	mA
		T <sub>a</sub> =100°C	50	

**电参数曲线图 / Electrical Characteristic Curve**

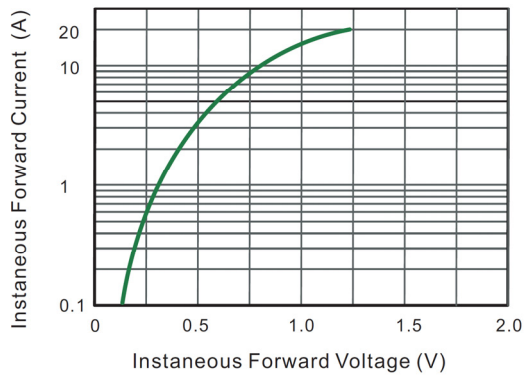
**Fig.1 Forward Current Derating Curve**



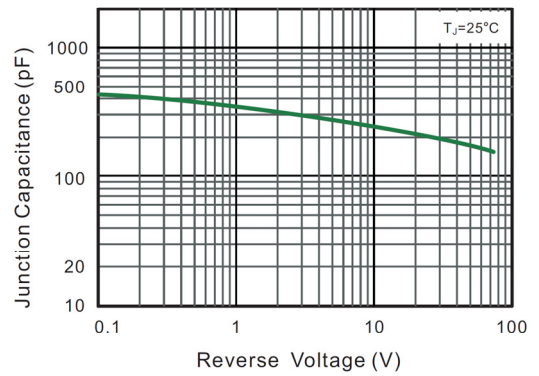
**Fig.2 Typical Reverse Characteristics**



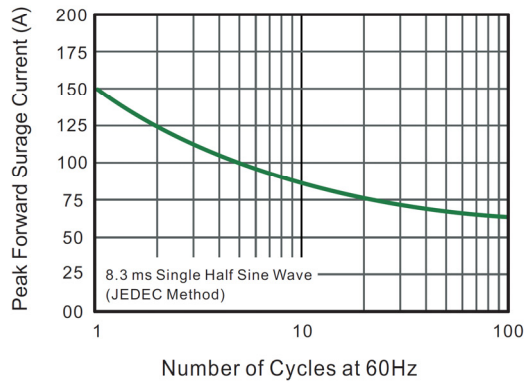
**Fig.3 Typical Forward Characteristic**



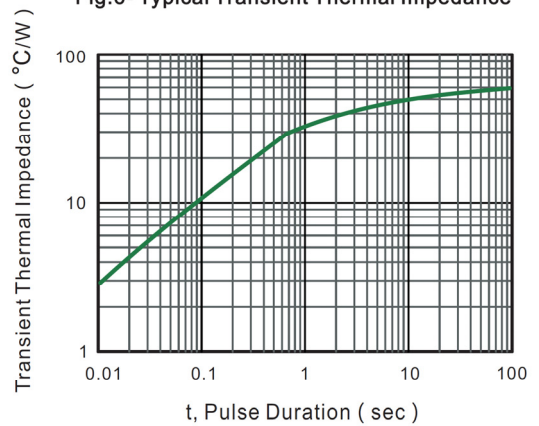
**Fig.4 Typical Junction Capacitance**



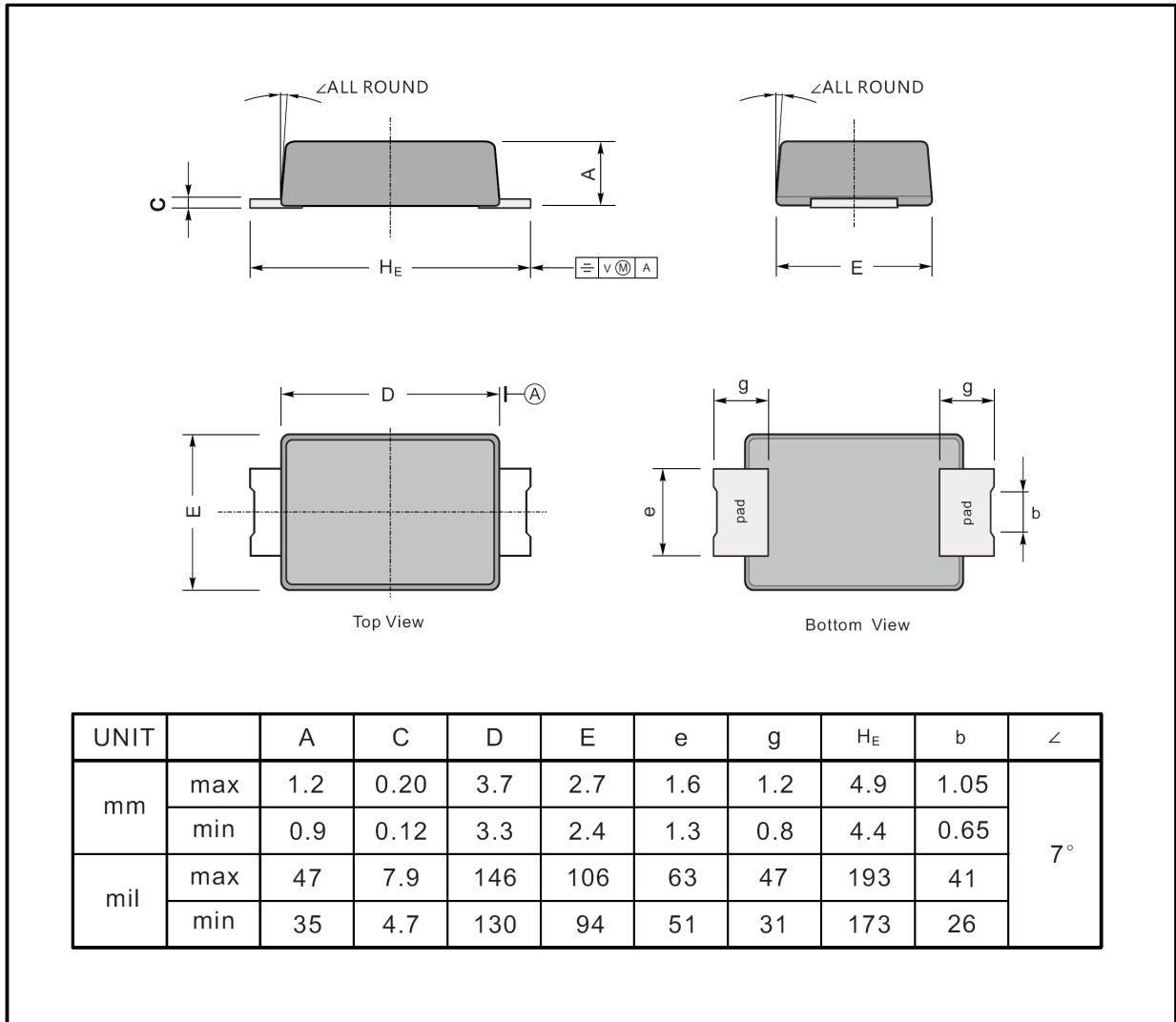
**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.6- Typical Transient Thermal Impedance**



**外形尺寸图 / Package Dimensions**



印章说明 / Marking Instructions



说明：

SL510：为型号代码

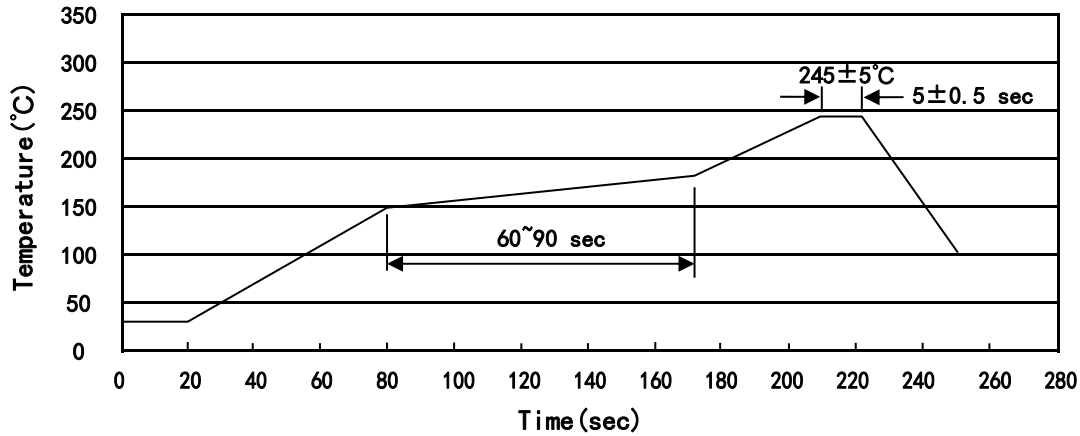
\*\*\*\*：为生产批号代码，随生产批号变化

Note:

SL510：Product Type Code

\*\*\*\*：Lot No. Code, code change with Lot No

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 150~180°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:150~180°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	3,000	5	15,000	6	90,000	7" ×12	185X180X105	390X385X205

使用说明 / Notices