

**描述 / Descriptions**

表面贴装肖特基整流二极管，反向电压：20~200V，正向电流：1.0A，薄型 SMAF 封装。

Surface Mount Schottky Barrier Rectifier, Reverse Voltage: 20 to 200 V, Forward Current: 1.0A, 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，适用于表面贴装。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. Halogen free product.

**用途 / Applications**

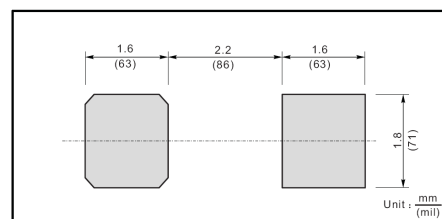
一般用途。

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<br>Parameter                                                                                  | 符号<br>Symbol        | 数值<br>Rating |       |       |       |        |        |        |        | 单位<br>Unit |
|--------------------------------------------------------------------------------------------------|---------------------|--------------|-------|-------|-------|--------|--------|--------|--------|------------|
|                                                                                                  |                     | SS12F        | SS14F | SS16F | SS18F | SS110F | SS112F | SS115F | SS120F |            |
| Maximum Repetitive Peak Reverse Voltage                                                          | V <sub>RRM</sub>    | 20           | 40    | 60    | 80    | 100    | 120    | 150    | 200    | V          |
| Maximum RMS voltage                                                                              | V <sub>RMS</sub>    | 14           | 28    | 42    | 56    | 70     | 84     | 105    | 140    | V          |
| Maximum DC Blocking Voltage                                                                      | V <sub>DC</sub>     | 20           | 40    | 60    | 80    | 100    | 120    | 150    | 200    | V          |
| Maximum Average Forward Rectified Current                                                        | I <sub>F (AV)</sub> | 1.0          |       |       |       |        |        |        |        | A          |
| Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I <sub>FSM</sub>    | 40           |       |       |       | 30     |        |        |        | A          |
| Typical Junction Capacitance <sup>1)</sup>                                                       | C <sub>i</sub>      | 110          |       | 80    |       |        |        |        |        | pF         |
| Typical Thermal Resistance <sup>2)</sup>                                                         | R <sub>θJA</sub>    | 95           |       |       |       |        |        |        |        | ℃/W        |
| Operating Junction Temperature Range                                                             | T <sub>j</sub>      | -55~+125     |       |       |       |        |        |        |        | ℃          |
| Storage Temperature Range                                                                        | T <sub>stg</sub>    | -55~+150     |       |       |       |        |        |        |        | ℃          |

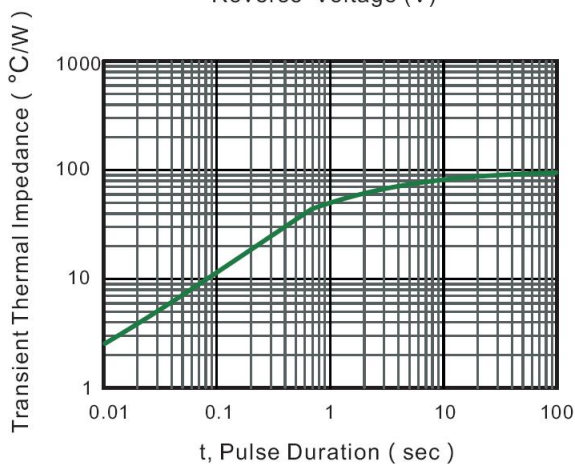
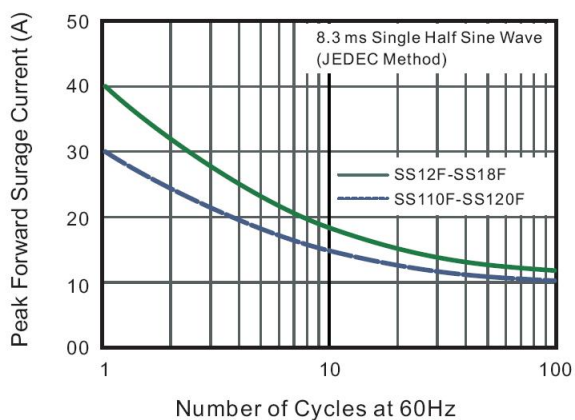
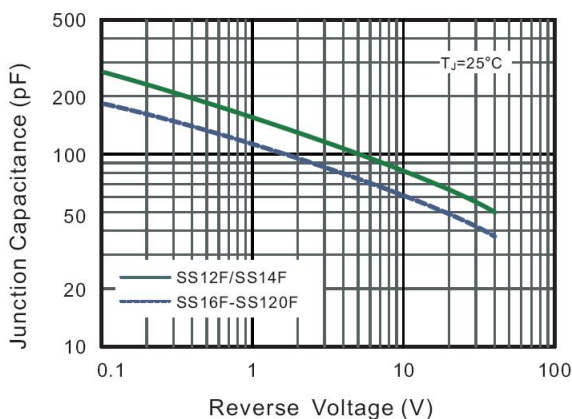
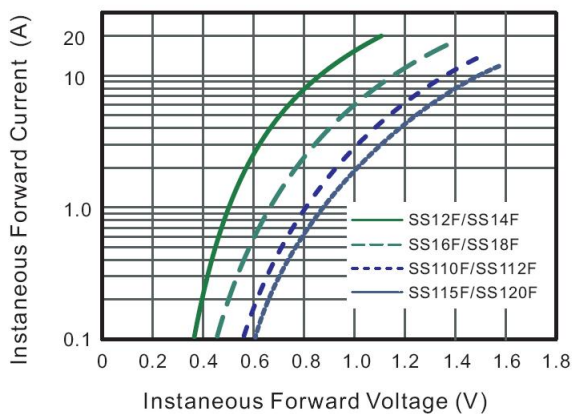
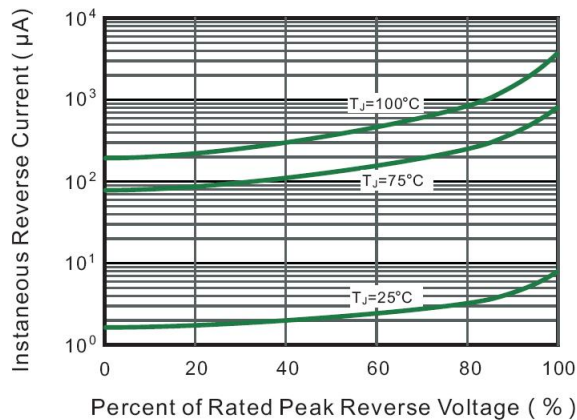
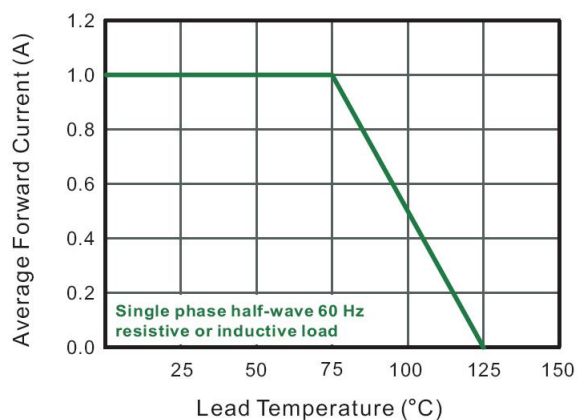
Note:

- 1) Measured at 1MHz and applied reverse voltage of 4 V D.C.  
 2) P.C.B. mounted with 0.2 X 0.2" (5 X 5 mm) copper pad areas.

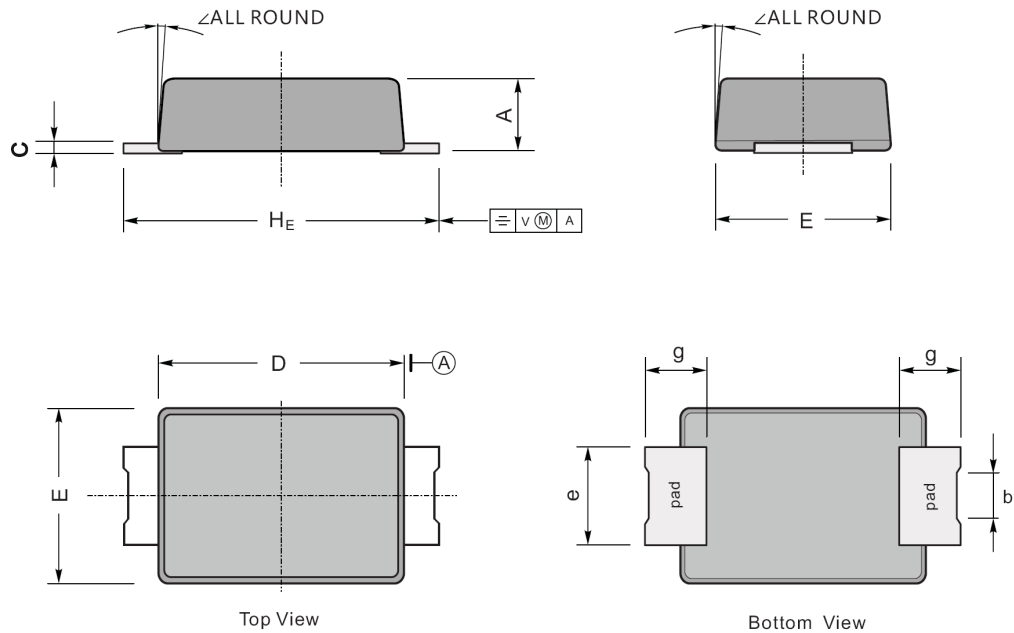
**电性能参数 / Electrical Characteristics(Ta=25°C)**

| 参数<br>Parameter                                                       | 符号<br>Symbol   | 测试条件<br>Test<br>Conditions | 数值<br>Rating |       |       |       |        |        |        |        | 单位<br>Unit |
|-----------------------------------------------------------------------|----------------|----------------------------|--------------|-------|-------|-------|--------|--------|--------|--------|------------|
|                                                                       |                |                            | SS12F        | SS14F | SS16F | SS18F | SS110F | SS112F | SS115F | SS120F |            |
| Max<br>Instantaneo<br>us Forward<br>Voltage                           | V <sub>F</sub> | I <sub>F</sub> =1.0A       | 0.55         |       | 0.70  |       | 0.85   |        | 0.90   |        | V          |
| Maximum DC<br>Reverse<br>Current<br>at Rated DC<br>Reverse<br>Voltage | I <sub>R</sub> | T <sub>a</sub> =25℃        | 0.3          |       |       |       | 0.2    |        | 0.1    |        | mA         |
|                                                                       |                | T <sub>a</sub> =100℃       | 10           |       |       |       | 5.0    |        | 2.0    |        |            |

## 电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions



| UNIT |     | A   | C    | D   | E   | e   | g   | $H_E$ | b    | $\angle$ |
|------|-----|-----|------|-----|-----|-----|-----|-------|------|----------|
| mm   | max | 1.2 | 0.20 | 3.7 | 2.7 | 1.6 | 1.2 | 4.9   | 1.05 | 7°       |
|      | min | 0.9 | 0.12 | 3.3 | 2.4 | 1.3 | 0.8 | 4.4   | 0.65 |          |
| mil  | max | 47  | 7.9  | 146 | 106 | 63  | 47  | 193   | 41   |          |
|      | min | 35  | 4.7  | 130 | 94  | 51  | 31  | 173   | 26   |          |

**印章说明 / Marking Instructions**

## Marking

| Type number | Marking code |
|-------------|--------------|
| SS12F       | SS12         |
| SS14F       | SS14         |
| SS16F       | SS16         |
| SS18F       | SS18         |
| SS110F      | SS110        |
| SS112F      | SS112        |
| SS115F      | SS115        |
| SS120F      | SS120        |

**印章说明 / Marking Instructions**



说明

SS12 : 为型号代码

\*\*\*\* : 为生产批号追溯码，第 1 个\*为年月代码，后面 3 个\*为当月小批号代码

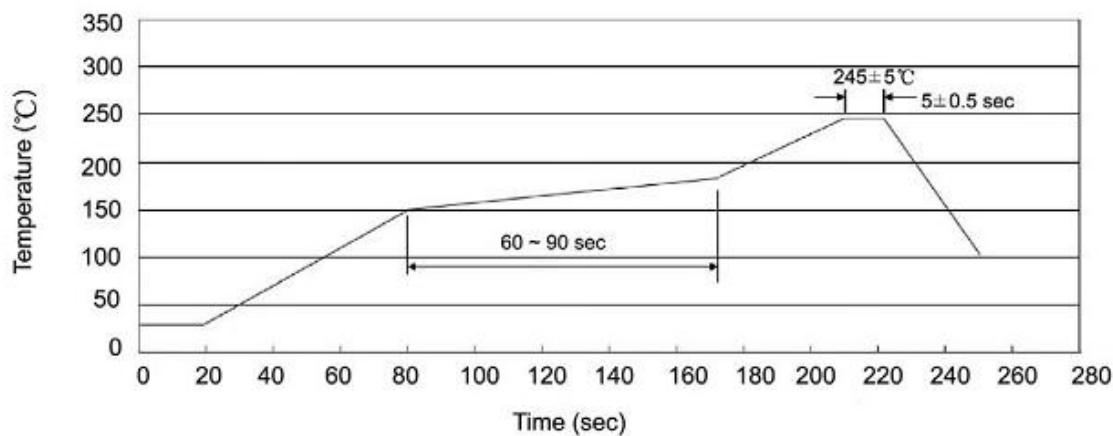
Note:

SS12 : Product Type Code

\*\*\*\* : Lot No. Code ,The 1st \* means:YM Code ,The last 3 \* means:little Lot  
No Code



# 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<br>封装形式 | Units 包装数量         |                         |                        |                              |                        | Dimension 包装尺寸 (unit: mm <sup>3</sup> ) |             |             |
|----------------------|--------------------|-------------------------|------------------------|------------------------------|------------------------|-----------------------------------------|-------------|-------------|
|                      | Units/Reel<br>只/卷盘 | Reels/Inner Box<br>卷盘/盒 | Units/Inner Box<br>只/盒 | Inner Boxes/Outer Box<br>盒/箱 | Units/Outer Box<br>只/箱 | Reel                                    | Inner Box 盒 | Outer Box 箱 |
| SMAF                 | 3000               | 5                       | 15000                  | 5                            | 75000                  | 7" ×11                                  | 185X180X105 | 390X385X205 |

## 使用说明 / Notices