

S3ABF~S3MBF

Rev.C Sep.-2017

描述 / Descriptions

表面贴装整流二极管，反向电压：50V~1000V，正向电流：3.0A，薄型 SMBF 封装。

Surface Mount General Purpose Silicon Rectifiers, Reverse Voltage: 50 to 1000V, Forward Current: 3.0A, SMBF thin package.

特征 / Features

玻璃钝化芯片，无铅符合欧盟 RoHS 指令 2011/65/EU，适用于表面贴装。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

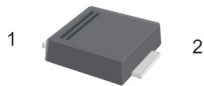
一般用途。

General purpose.

内部等效电路 / Equivalent Circuit

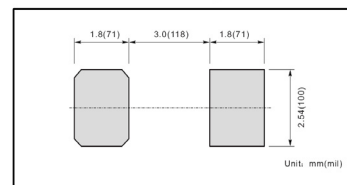


引脚排列 / Pinning



| 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 |
|---|-----------------|--------------|-------|-------|-------|-------|-------|-------|------------|
| | | S3ABF | S3BBF | S3DBF | S3GBF | S3JBF | S3KBF | S3MBF | |
| 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 at $T_a=115^\circ\text{C}$ | $I_{F(AV)}$ | 3.0 | | | | | | | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) | I_{FSM} | 100 | | | | | | | A |
| Typical Junction Capacitance ¹⁾ | C_j | 35 | | | | | | | pF |
| Typical Thermal Resistance ²⁾ | $R_{\theta JA}$ | 45 | | | | | | | °C/W |
| | $R_{\theta JC}$ | 15 | | | | | | | |
| Operating and Storage Temperature Range | T_j, T_{stg} | -55~+150 | | | | | | | °C |

Note:

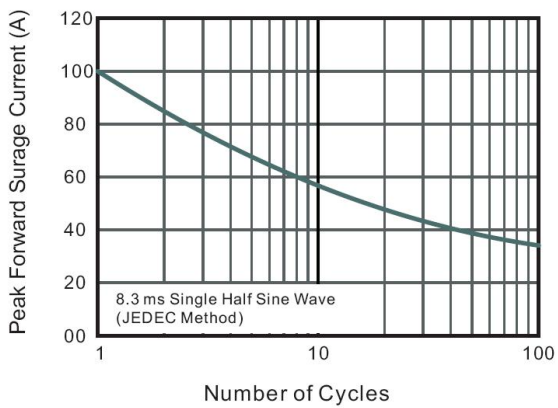
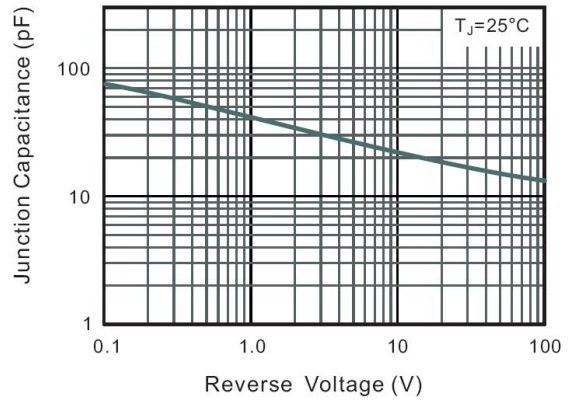
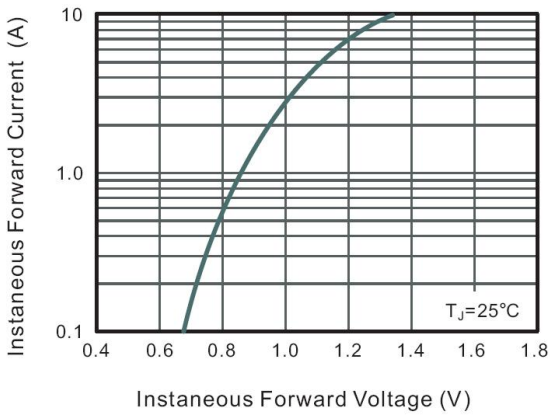
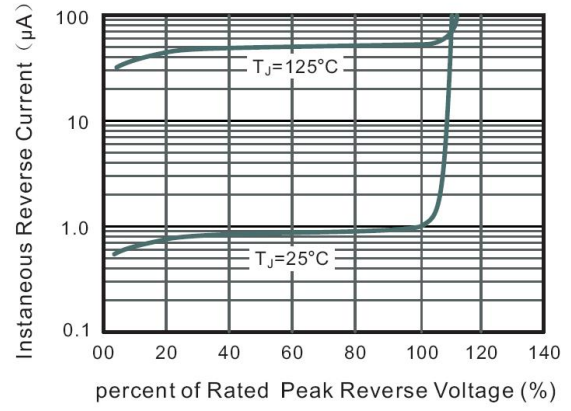
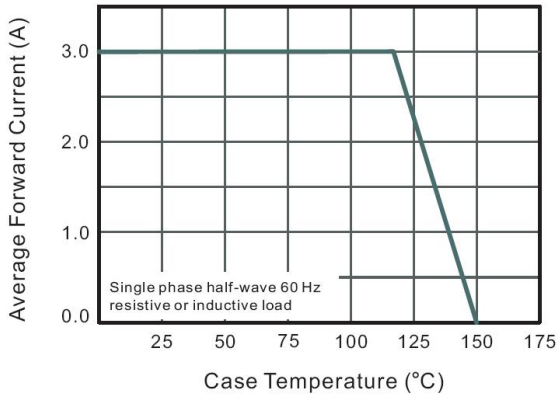
1) Measured at 1MHz and applied reverse voltage of 4V D.C

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)

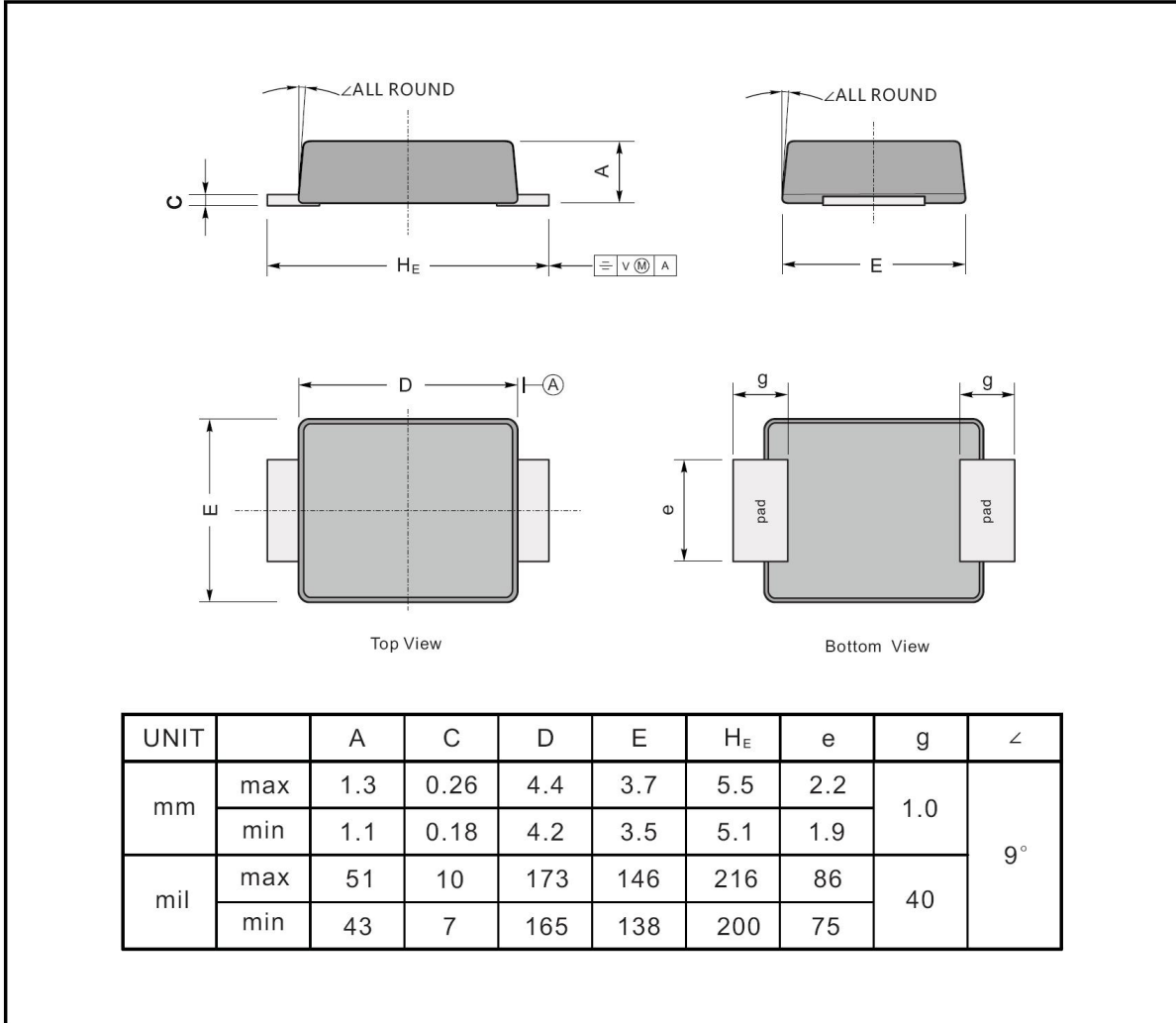
| 参数 Parameter | 符号 Symbol | 测试条件 Test Conditions | 数值 Rating | 单位 Unit |
|---|--------------|-------------------------|--------------|---------------|
| Maximum Forward Voltage | V_F | $I_F=3.0\text{A}$ | 1.1 | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I_R | $T_a=25^\circ\text{C}$ | 5.0 | μA |
| | | $T_a=125^\circ\text{C}$ | 150 | μA |

电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions

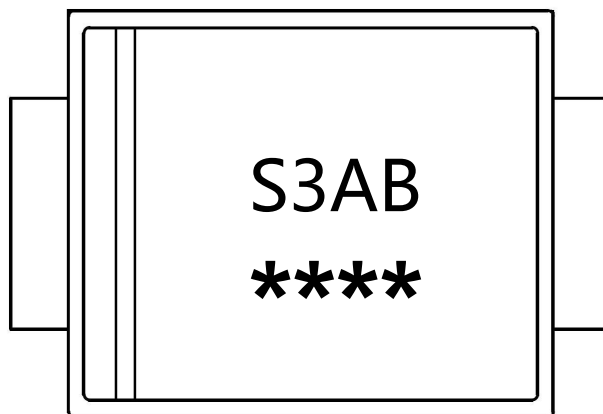
SMBF



印章说明 / Marking Instructions**Marking**

| Type number | Marking code |
|-------------|--------------|
| S3ABF | S3AB |
| S3BBF | S3BB |
| S3DBF | S3DB |
| S3GBF | S3GB |
| S3JBF | S3JB |
| S3KBF | S3KB |
| S3MBF | S3MB |

印章说明 / Marking Instructions



说明：

S3AB： 为型号代码

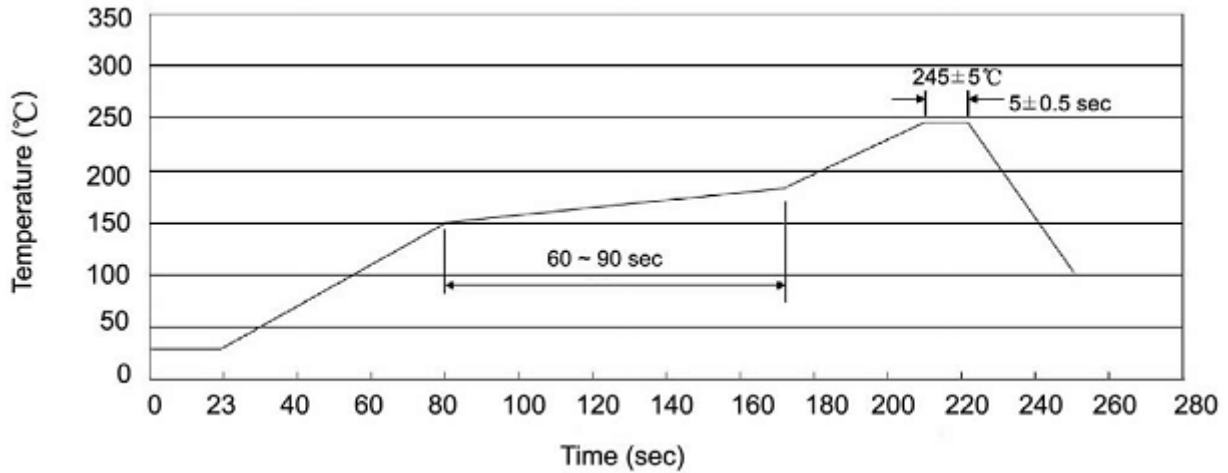
****： 为生产批号追溯码，第1个*为年月代码，后面3个*为当月小批号代码

Note:

S3AB： 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 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 ³) | | |
|----------------------|--------------------|-------------------------|------------------------|------------------------------|------------------------|---|-------------|-------------|
| | 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 |
| SMBF | 5000 | 2 | 10000 | 5 | 50000 | 13" ×15 | 336X332X40 | 380X335X366 |

使用说明 / Notices