

描述 / Descriptions

表面贴装整流二极管，反向电压：50V~1000V，正向电流：3.0A，SMB 封装。
Surface Mount General Purpose Silicon Rectifiers, Reverse Voltage : 50 to1000V,Forward Current:3.0A ,SMB 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.

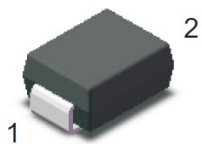
用途 / Applications

一般用途。
General purpose.

内部等效电路 / Equivalent Circuit

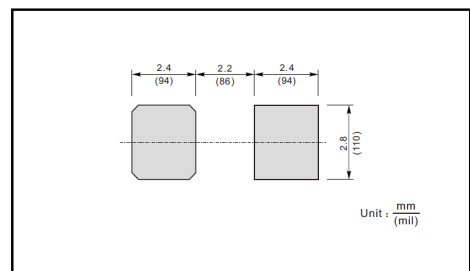


引脚排列 / Pinning



| 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 |
|--|-----------------|--------------|------|------|------|------|------|------|------------|
| | | S3AB | S3BB | S3DB | S3GB | S3JB | S3KB | S3MB | |
| 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 | I_{FSM} | 90 | | | | | | | A |
| Typical Junction Capacitance at VR=4V f=1MHz | C_j | 35 | | | | | | | pF |
| Typical Thermal Resistance ¹⁾ | $R_{\theta JA}$ | 48 | | | | | | | °C/W |
| | $R_{\theta JC}$ | 16 | | | | | | | |
| Operating and Storage Temperature Range | T_j, T_{stg} | -55~+150 | | | | | | | °C |

Note:

1) P.C.B. mounted with 2.0 X 2.0" (5 X 5cm) 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 |
|---|--------------|-------------------------|--------------|------|------|------|------|------|------|------------|
| | | | S3AB | S3BB | S3DB | S3GB | S3JB | S3KB | S3MB | |
| Maximum Instantaneous Forward Voltage | V_F | $I_F=3.0A$ | 1.1 | | | | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I_R | $T_a=25^\circ C$ | 5.0 | | | | | | | μA |
| | | $T_a=125^\circ C$ | 100 | | | | | | | μA |

电参数曲线图 / Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

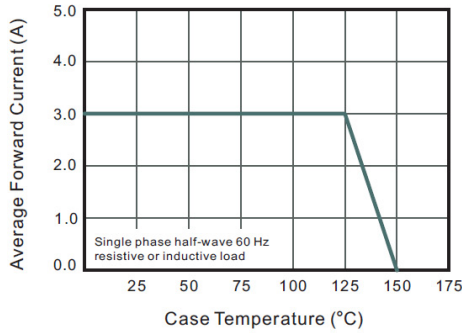


Fig.2 Typical Instaneous Reverse Characteristics

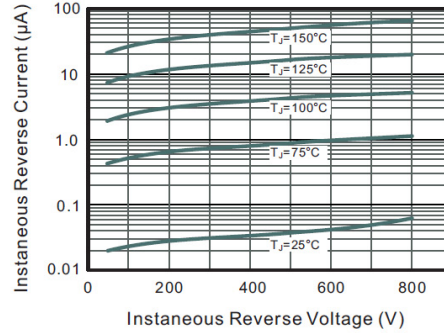


Fig.3 Typical Forward Characteristic

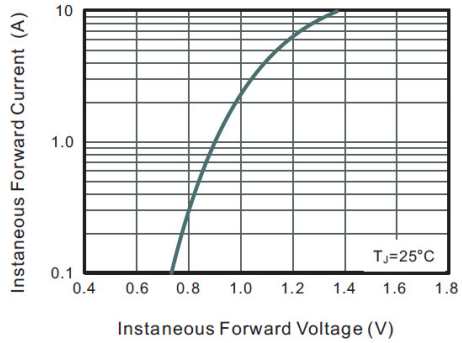


Fig.4 Typical Junction Capacitance

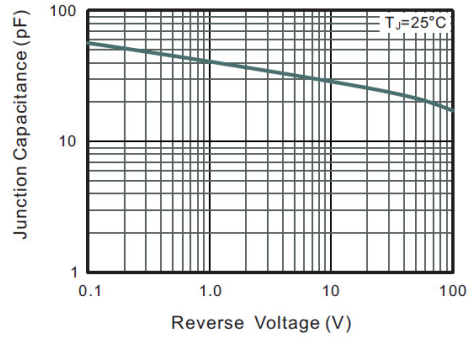
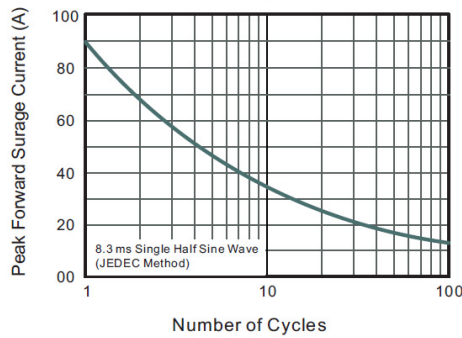
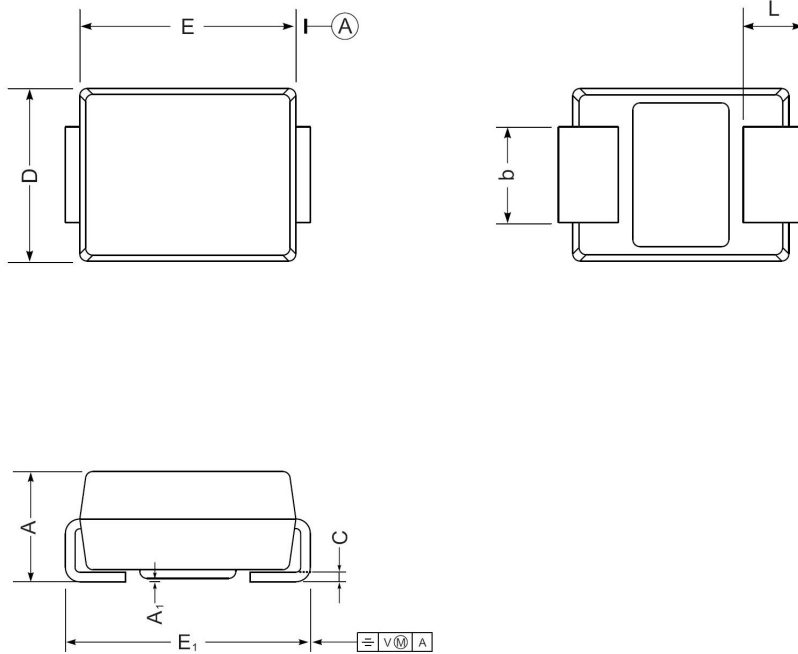


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



外形尺寸图 / Package Dimensions

SMB



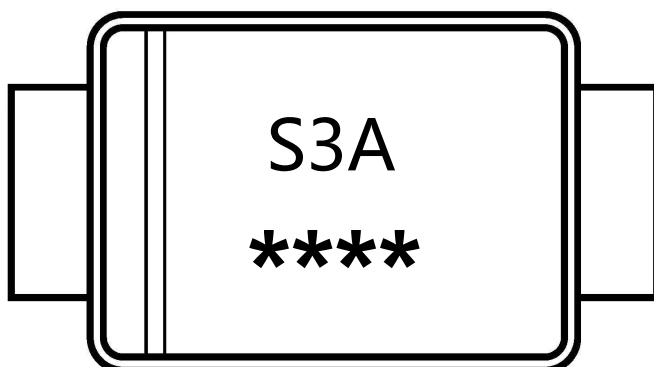
SMB mechanical data

| UNIT | | A | E | D | E ₁ | A ₁ | L | C | b |
|------|-----|------|------|------|----------------|----------------|-----|-------|-----|
| mm | max | 2.44 | 4.70 | 3.94 | 5.59 | 0.20 | 1.5 | 0.305 | 2.2 |
| | min | 2.13 | 4.06 | 3.3 | 5.08 | 0.05 | 0.8 | 0.152 | 1.9 |
| mil | max | 96 | 185 | 155 | 220 | 7.9 | 59 | 12 | 87 |
| | min | 84 | 160 | 130 | 200 | 2.0 | 32 | 6 | 75 |

Marking

| Type number | Marking code |
|-------------|--------------|
| S3AB | S3A |
| S3BB | S3B |
| S3DB | S3D |
| S3GB | S3G |
| S3JB | S3J |
| S3KB | S3K |
| S3MB | S3M |

印章说明 / Marking Instructions



说明：

S3A： 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:

S3A： 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 |
| SMB | 3000 | 5 | 15000 | 5 | 75000 | 7" ×11 | 185X180X105 | 390X385X205 |

使用说明 / Notices

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