

### 描述 / Descriptions

表面贴装肖特基整流二极管，反向电压：100V，正向电流：3.0A，SMC封装。  
Surface Mount Schottky Barrier Rectifier, Reverse Voltage: 100V, Forward Current:3.0A, SMC package.

### 特征 / Features

金属硅结，多数载流子传导，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。  
Metal silicon junction, majority carrier conduction, 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

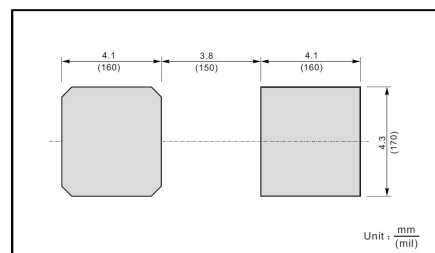


### 引脚排列 / Pinning



| 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 |
|--|-----------------|--------------|------------|
|  |                 | SSL310C      |            |
| Maximum Repetitive Peak Reverse Voltage  | $V_{RRM}$       | 100          | V          |
| Maximum RMS voltage  | $V_{RMS}$       | 70           | V          |
| Maximum DC Blocking Voltage  | $V_{DC}$        | 100          | V          |
| Maximum Average Forward Rectified Current  | $I_{F(AV)}$     | 3.0          | A          |
| Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | $I_{FSM}$       | 80           | A          |
| Typical Junction Capacitance <sup>1)</sup>   | $C_i$           | 180          | pF         |
| Typical Thermal Resistance <sup>2)</sup>   | $R_{\theta JA}$ | 70           | °C/W       |
| Operating Junction Temperature Range   | $T_j$           | -55 ~ +150   | °C         |
| Storage Temperature Range  | $T_{stg}$       | -55 ~ +150   | °C         |

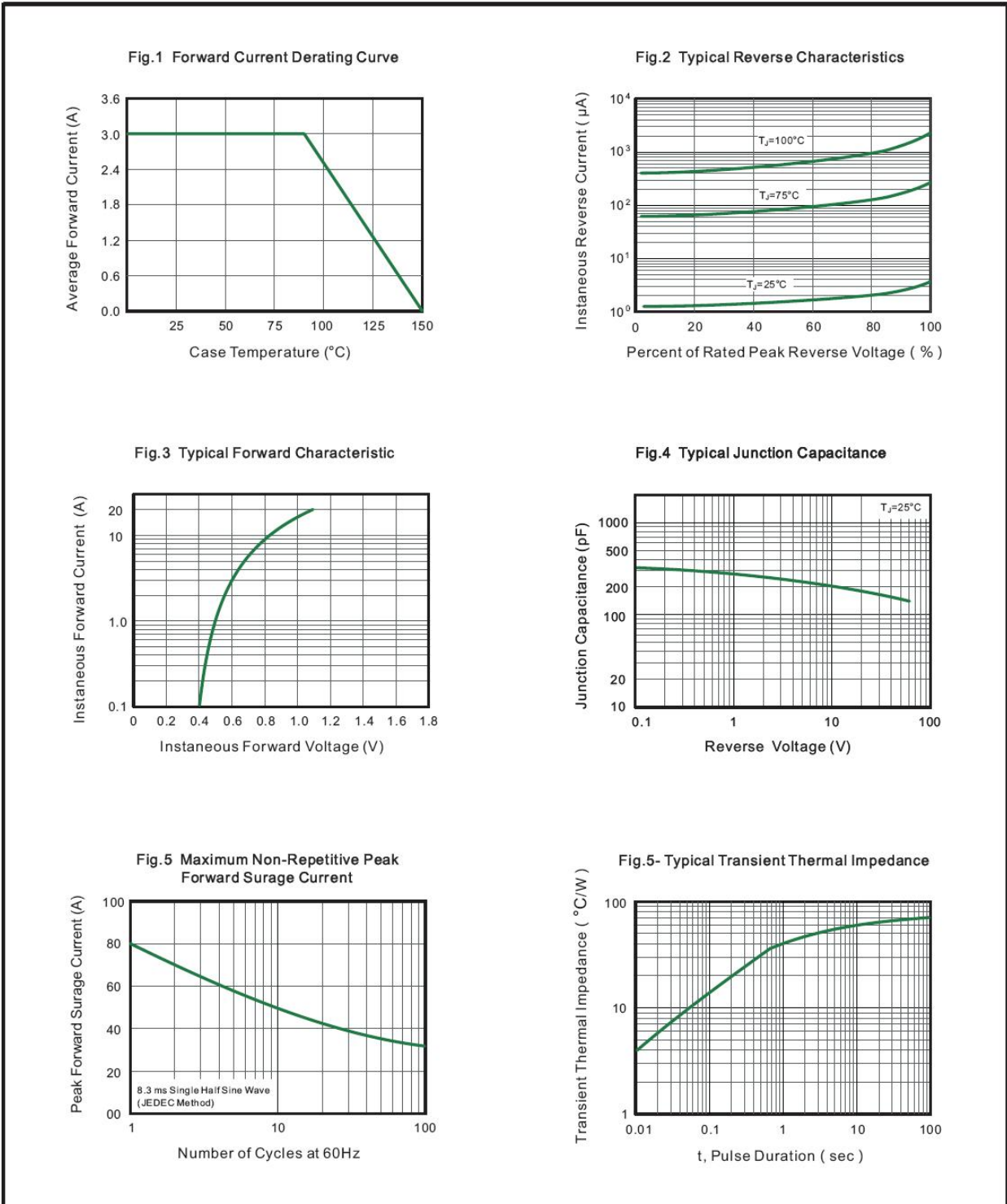
Note:

- 1) Measured at 1MHz 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)**

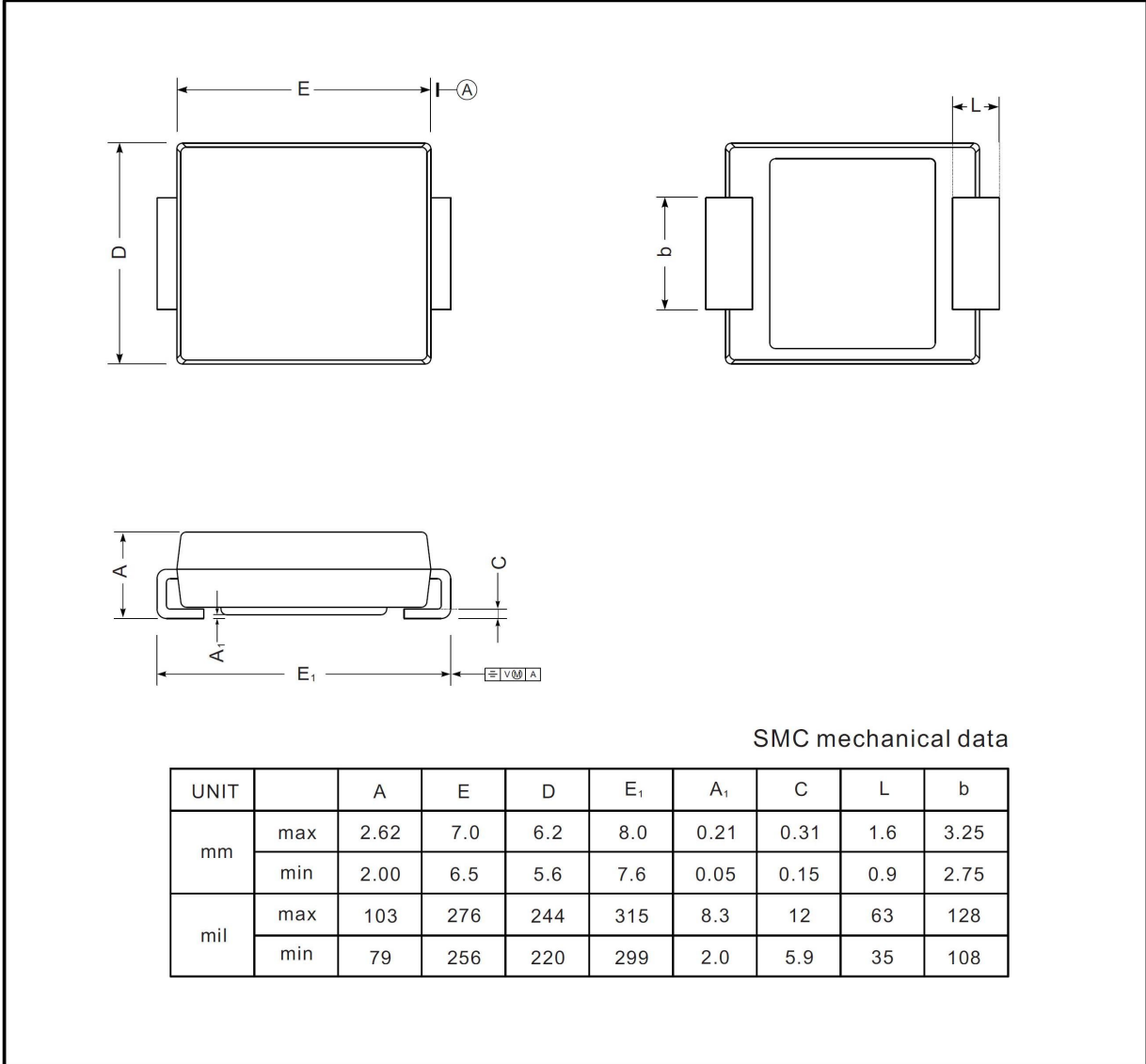
| 参数<br>Parameter  | 符号<br>Symbol | 测试条件<br>Test Conditions | 数值<br>Rating | 单位<br>Unit |
|--|--------------|-------------------------|--------------|------------|
|  |              |                         | SSL310C      |            |
| Max Instantaneous Forward Voltage                      | $V_F$        | $I_F=3.0A$              | 0.6          | V          |
| Maximum DC Reverse Current at Rated DC Reverse Voltage | $I_R$        | $T_a=25^\circ C$        | 0.3          | mA         |

电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions

SMC



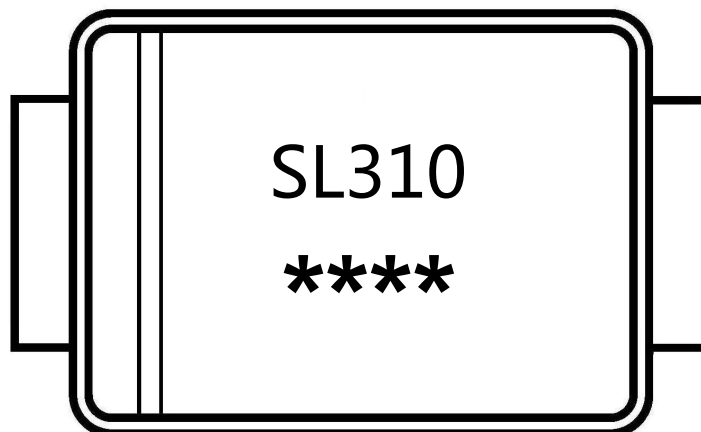
SMC mechanical data

| UNIT |     | A    | E   | D   | E <sub>1</sub> | A <sub>1</sub> | C    | L   | b    |
|------|-----|------|-----|-----|----------------|----------------|------|-----|------|
| mm   | max | 2.62 | 7.0 | 6.2 | 8.0            | 0.21           | 0.31 | 1.6 | 3.25 |
|      | min | 2.00 | 6.5 | 5.6 | 7.6            | 0.05           | 0.15 | 0.9 | 2.75 |
| mil  | max | 103  | 276 | 244 | 315            | 8.3            | 12   | 63  | 128  |
|      | min | 79   | 256 | 220 | 299            | 2.0            | 5.9  | 35  | 108  |

## Marking

| Type number | Marking code |
|-------------|--------------|
| SSL310C     | SL310        |

印章说明 / Marking Instructions



说明：

SL310：为型号代码

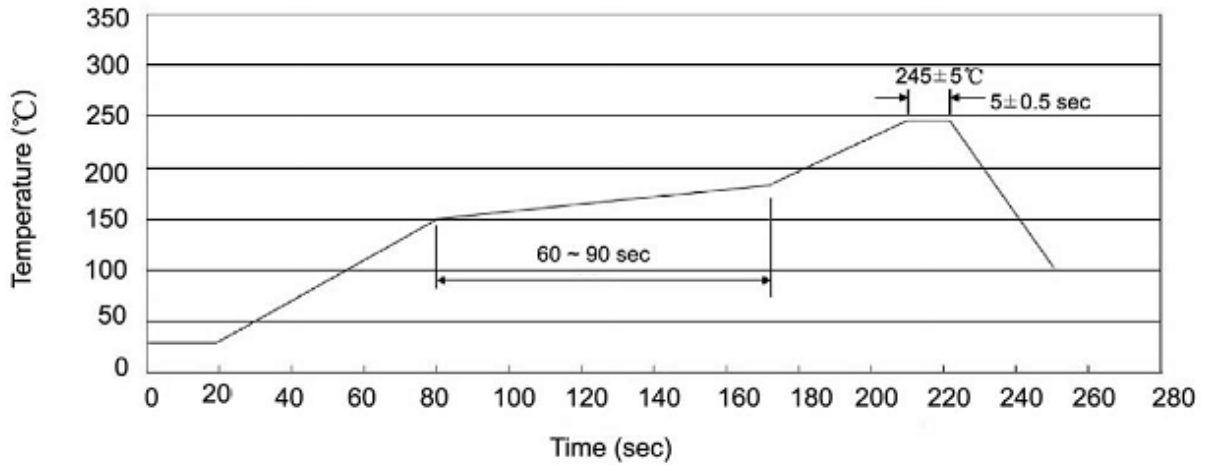
\*\*\*\*：为生产批号追溯码，第1个\*为年月代码，后面3个\*为当月小批号代码

Note:

SL310：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 |
| SMC                  | 3000               | 2                       | 6000                   | 6                            | 36000                  | 13" ×16                                 | 337X337X49  | 380X335X366 |

**使用说明 / Notices**