

# SD103AWS/BWS/CWS

Rev.H Apr.-2018

## 描述 / Descriptions

SOD-323 塑封封装 肖特基二极管。  
Schottky Diode in a SOD-323 Plastic Package.

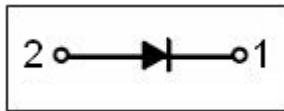
## 特征 / Features

低正向压降，可忽略的反向恢复时间。无卤产品。  
Low positive pressure drop, can ignore the reverse recovery time. HF Product.

## 用途 / Applications

肖特基二极管。  
Schottky diode.

## 内部等效电路 / Equivalent Circuit



## 引脚排列 / Pinning



PIN1:Cathode      PIN2:Anode

## 放大及印章代码 / h<sub>FE</sub> Classifications & Marking

|         |          |          |          |
|---------|----------|----------|----------|
| Model   | SD103AWS | SD103BWS | SD103CWS |
| Marking | HS4      | HS5      | HS6      |

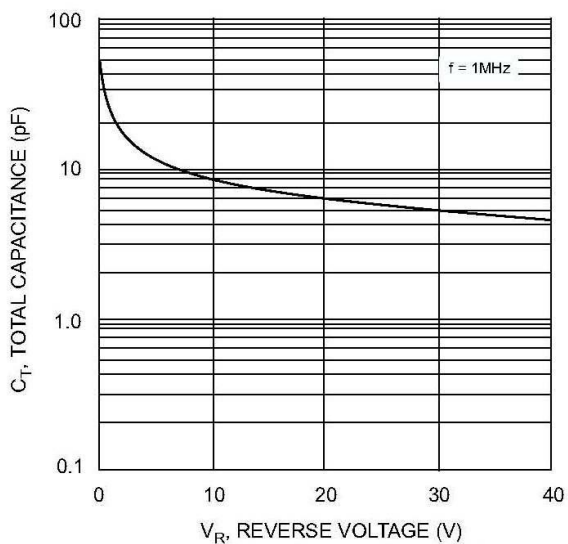
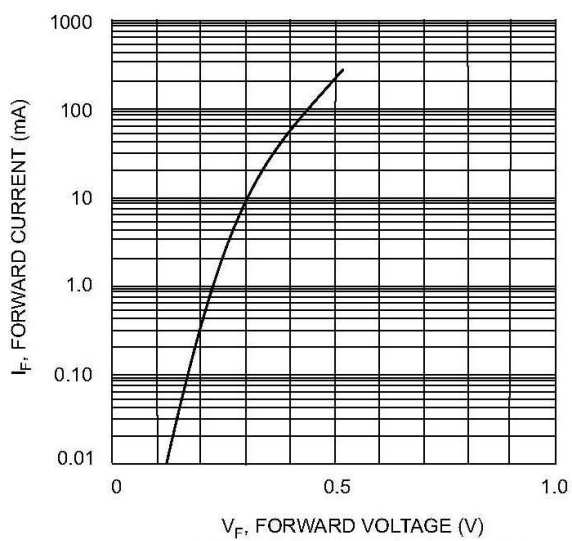
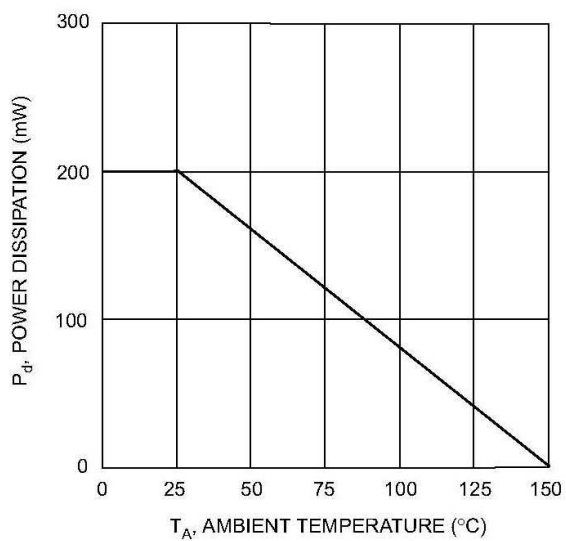
**极限参数 / Absolute Maximum Ratings(Ta=25°C)**

| 参数<br>Parameter   | 符号<br>Symbol                    | 数值<br>Rating |          |          | 单位<br>Unit |
|---|---------------------------------|--------------|----------|----------|------------|
|   |                                 | SD103AWS     | SD103BWS | SD103CWS |            |
| Peak Repetitive Reverse Voltage ,<br>Working Peak Reverse Voltage<br>DC Reverse Voltage | $V_{RRM}$<br>$V_{RWM}$<br>$V_R$ | 40           | 30       | 20       | V          |
| RMS Reverse Voltage   | $V_{R(RMS)}$                    | 28           | 21       | 14       | V          |
| Non-Repetitive Peak Forward<br>Current  | $I_{FM}$                        | 350          |          |          | mA         |
| Non-Repetitive Peak Forward<br>Surge Current  | $I_{FSM}$                       | 1.5          |          |          | A          |
| Power Dissipation   | $P_D$                           | 200          |          |          | mW         |
| Typical Thermal Resistance<br>Junction to Ambient                                       | $R_{\theta JA}$                 | 625          |          |          | °C/W       |
| Junction and Storage<br>Temperature Range   | $T_J, T_{stg}$                  | -65~125      |          |          | °C         |

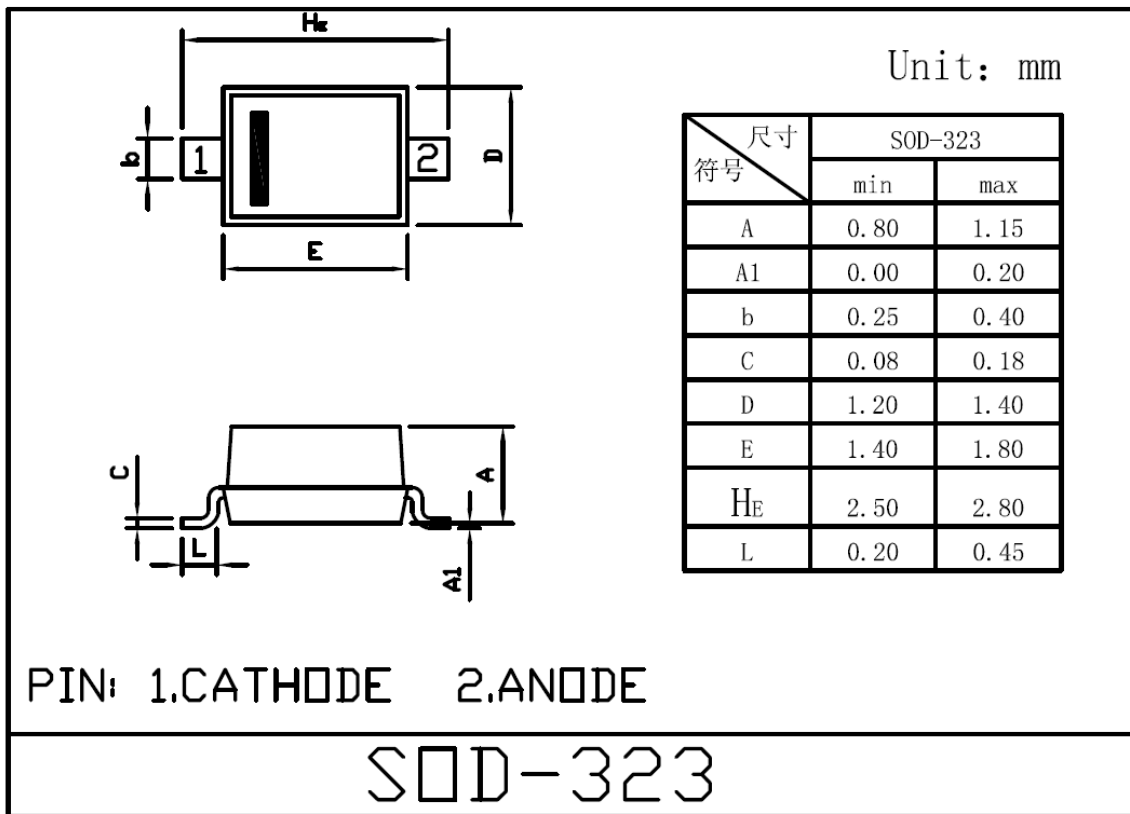
**电性能参数 / Electrical Characteristics(Ta=25°C)**

| 参数<br>Parameter                     | 符号<br>Symbol | 测试条件<br>Test Conditions                                    | 数值<br>Rating |            |            | 单位<br>Unit |           |
|-------------------------------------|--------------|--|--------------|------------|------------|------------|-----------|
|                                     |              |  | 最小值<br>Min   | 典型值<br>Typ | 最大值<br>Max |            |           |
| Reverse Breakdown Voltage           | $V_{(BR)}$   | $I_R=10\mu A$  | VR           |            |            | V          |           |
| Forward Voltage Drop                | $V_{FM}$     | $I_F=20mA$   |              |            | 0.37       | V          |           |
|                                     |              | $I_F=200mA$  |              |            | 0.6        |            |           |
| Instantaneous<br>Reverse<br>Current | SD103AWS     | $I_{RM}$   |              |            | 5.0        | uA         |           |
|                                     | SD103BWS     |  |              |            |            |            | $V_R=30V$ |
|                                     | SD103CWS     |  |              |            |            |            | $V_R=20V$ |
|                                     |              |  |              |            |            |            |           |
|                                     |              | $V_R=10V$  |              |            |            |            |           |
| Reverse Recovery Time               | $t_{rr}$     | $I_F=I_R=200mA$<br>$I_{rr}=0.1 \times I_R$ $R_L=100\Omega$ |              | 10         |            | ns         |           |
| Total Capacitance                   | $C_T$        | $V_R=0V$ $f=1.0MHz$  |              | 50         |            | pF         |           |

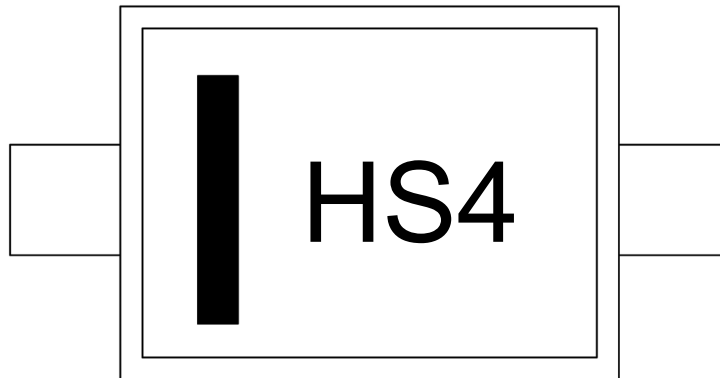
电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions



印章说明 / Marking Instructions



说明：

H： 为公司代码

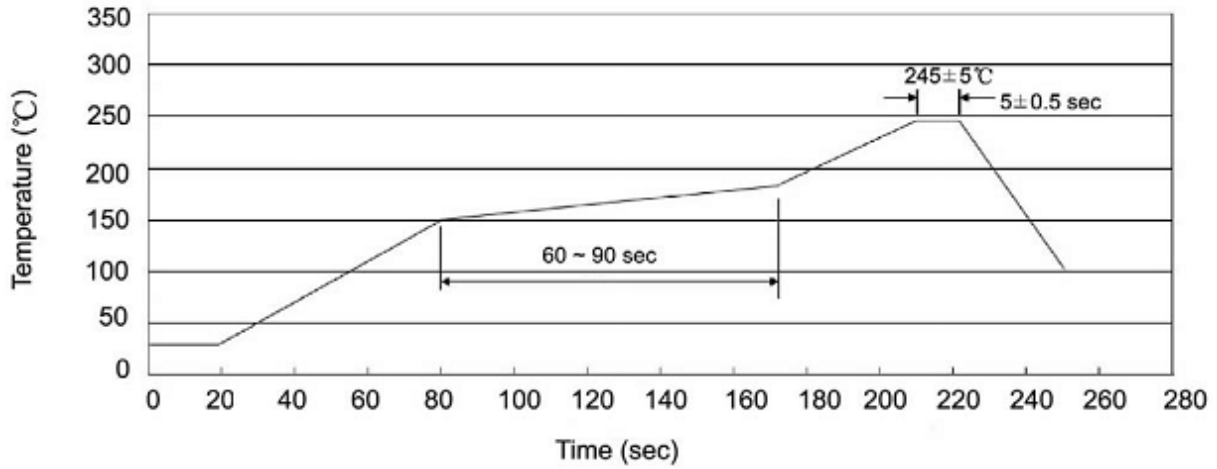
S4： 为型号代码

Note:

H: Company Code.

S4: Product Type.

**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 |
| SOD-323              | 3,000              | 10                      | 30,000                 | 6                            | 180,000                | 7" ×8                                   | 180×120×180 | 390×385×205 |

**使用说明 / Notices**