

# B5817WS-B5819WS

Rev.1 Aug.-2018

## 描述 / Descriptions

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

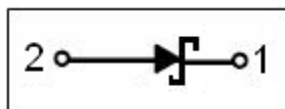
## 特征 / Features

低正向压降。无卤产品。  
Low positive pressure drop. 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   | B5817WS | B5818WS | B5819WS |
| Marking | HSJ     | HSK     | HSL     |

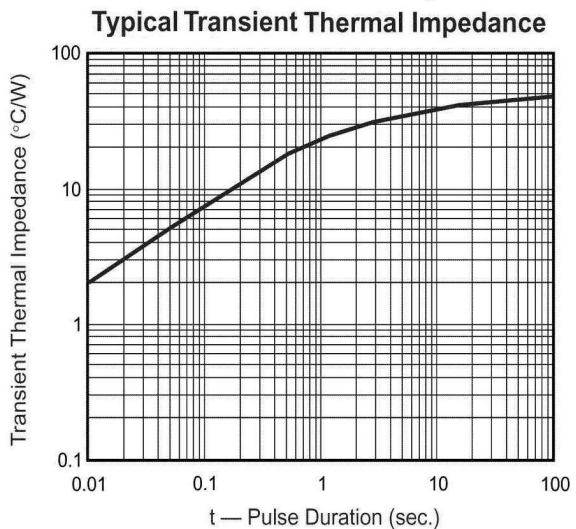
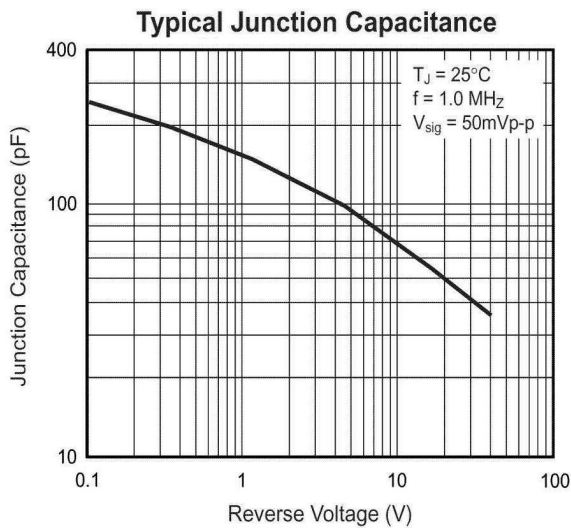
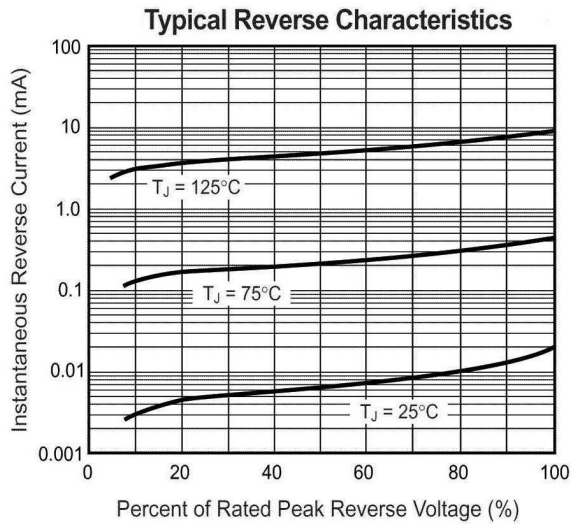
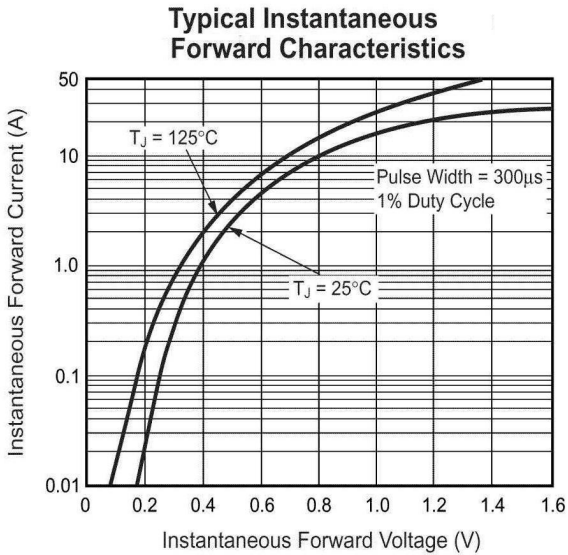
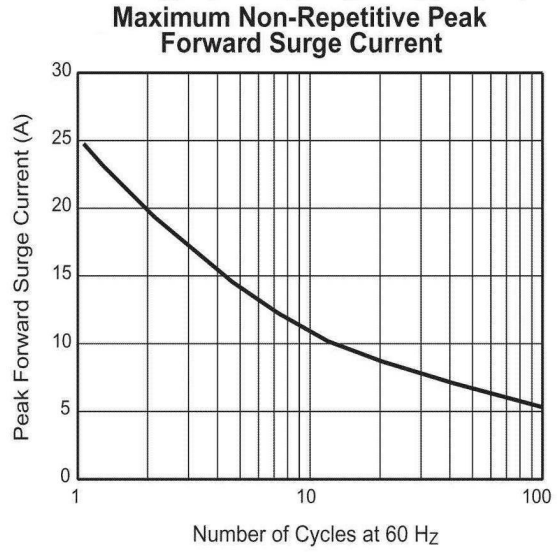
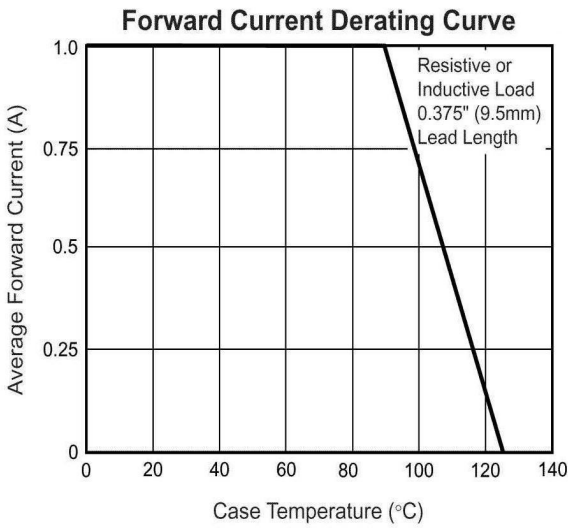
**极限参数 / Absolute Maximum Ratings(Ta=25°C)**

| 参数<br>Parameter  | 符号<br>Symbol                    | 数值<br>Rating |         |         | 单位<br>Unit |
|--|---------------------------------|--------------|---------|---------|------------|
|  |                                 | B5817WS      | B5818WS | B5819WS |            |
| Peak Repetitive Reverse Voltage ,<br>Working Peak Reverse Voltage,<br>DC Reverse Voltage | $V_{RRM}$<br>$V_{RWM}$<br>$V_R$ | 20           | 30      | 40      | V          |
| RMS Reverse Voltage  | $V_{R(RMS)}$                    | 14           | 21      | 28      | V          |
| Average Rectified Forward Current  | $I_F$                           | 1            |         |         | A          |
| Non-Repetitive Peak Forward Surge Current  | $I_{FSM}$                       | 25           |         |         | A          |
| Power Dissipation  | $P_d$                           | 200          |         |         | mW         |
| Typical Thermal Resistance<br>Junction to Ambient  | $R_{\theta JA}$                 | 500          |         |         | °C/W       |
| Junction and Storage Temperature<br>Range  | $T_J, T_{stg}$                  | -65 to 125   |         |         | °C         |

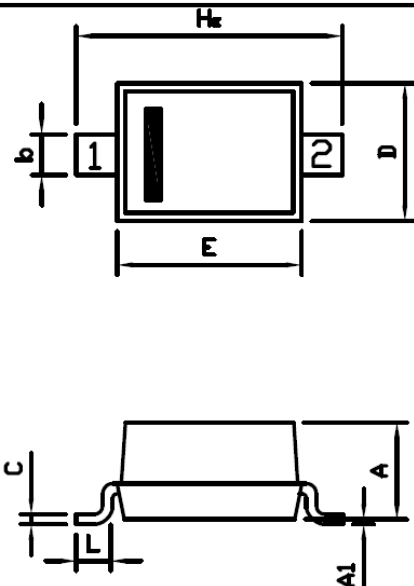
**电性能参数 / Electrical Characteristics(Ta=25°C)**

| 参数<br>Parameter                  | 符号<br>Symbol | 测试条件<br>Test Conditions    | 数值<br>Rating |      | 单位<br>Unit |
|----------------------------------|--------------|----------------------------|--------------|------|------------|
|                                  |              |                            | MIN          | MAX  |            |
| Reverse breakdown<br>voltage     | $V_{(BR)}$   | $I_R=100\mu A$             | B5817WS      | 20   | V          |
|                                  |              |                            | B5818WS      | 30   |            |
|                                  |              |                            | B5819WS      | 40   |            |
| Peak Forward Voltage             | $V_{FM}$     | $I_F=0.1A$                 | B5817WS      | 0.32 | V          |
|                                  |              |                            | B5818WS      | 0.35 |            |
|                                  |              |                            | B5819WS      | 0.4  |            |
|                                  |              | $I_F=1A$                   | B5817WS      | 0.45 |            |
|                                  |              |                            | B5818WS      | 0.55 |            |
|                                  |              |                            | B5819WS      | 0.65 |            |
|                                  |              | $I_F=3A$<br>( $t<5\mu s$ ) | B5817WS      | 0.75 |            |
|                                  |              |                            | B5818WS      | 0.80 |            |
|                                  |              |                            | B5819WS      | 0.90 |            |
| Instantaneous Reverse<br>Current | $I_{RM}$     | $V_R=V_{RWM}$              | 1            |      | mA         |
| Junction Capacitance             | $C_J$        | $V_R=4V$ $f=1.0MHz$        | 120          |      | pF         |

**电参数曲线图 / Electrical Characteristic Curve**



外形尺寸图 / Package Dimensions



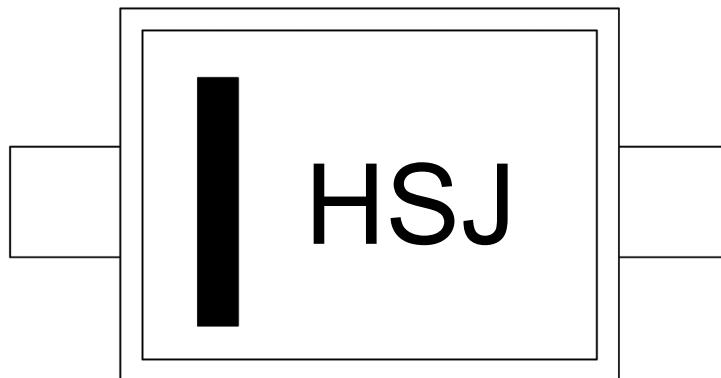
Unit: mm

| 尺寸<br>符号 | SOD-323 |      |
|----------|---------|------|
|          | min     | max  |
| A        | 0.80    | 1.15 |
| A1       | 0.00    | 0.20 |
| b        | 0.25    | 0.40 |
| C        | 0.08    | 0.18 |
| D        | 1.20    | 1.40 |
| E        | 1.40    | 1.80 |
| HE       | 2.50    | 2.80 |
| L        | 0.20    | 0.45 |

PIN: 1.CATHODE 2.ANODE

SOD-323

印章说明 / Marking Instructions



说明：

H： 为公司代码

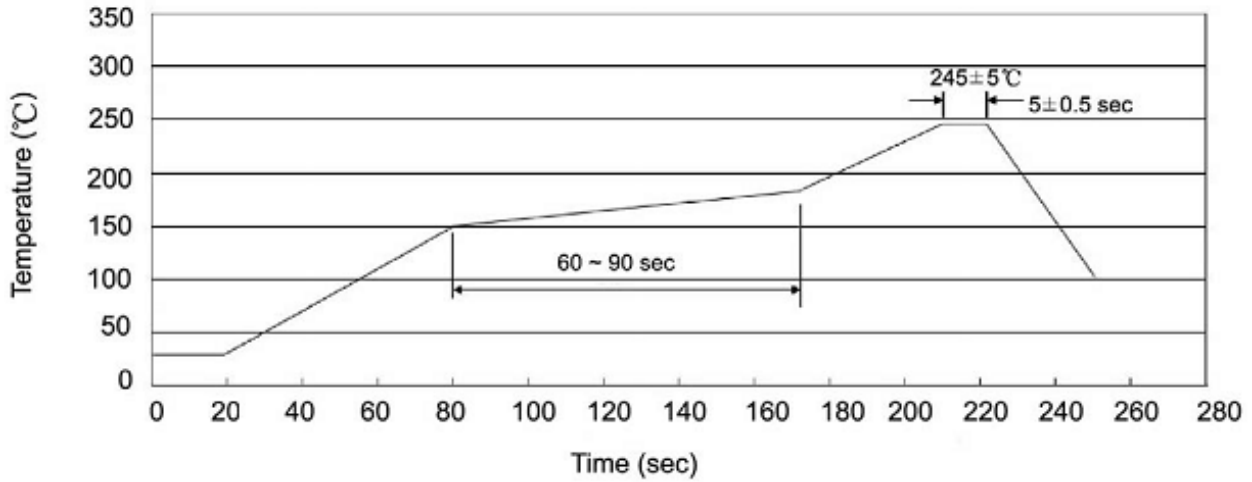
SJ： 为型号代码

Note:

H: Company Code.

SJ: 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**