

描述 / Descriptions

SOD-123 塑封封装 硅半导体二极管。
Silicon Diode in a SOD-123 Plastic Package.

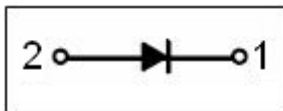
特征 / Features

开关速度快。无卤产品。
Fast switching diodes. HF Product.

用途 / Applications

用于小信号处理。
Small signal 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_{FE} Classifications & Marking

| | |
|---------|-----|
| Marking | HA2 |
|---------|-----|

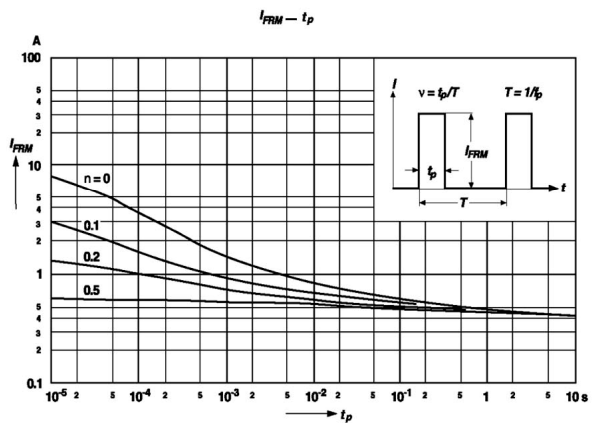
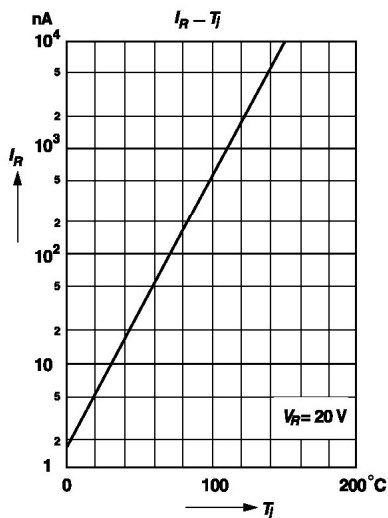
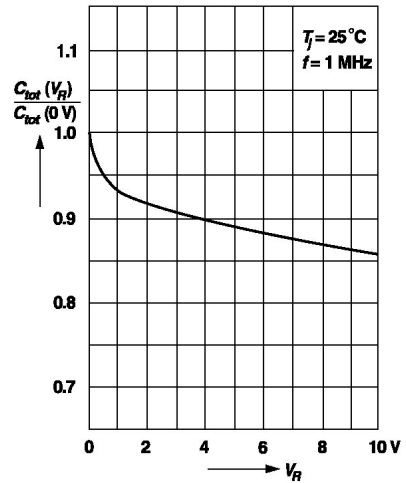
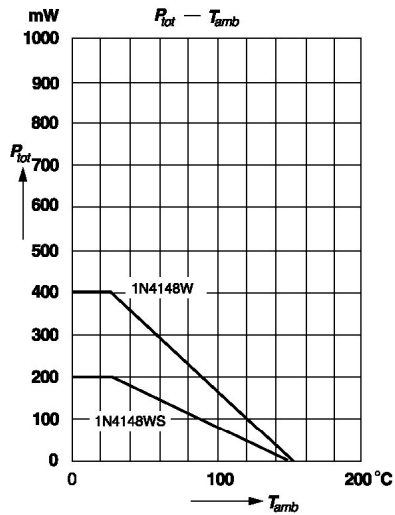
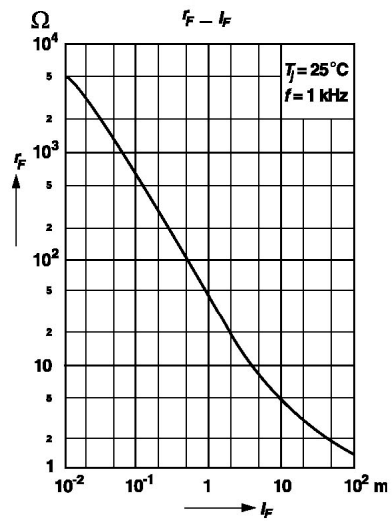
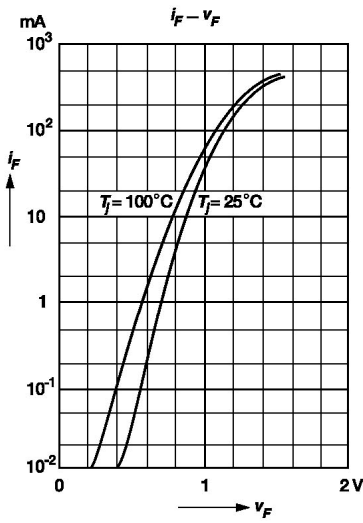
极限参数 / Absolute Maximum Ratings(Ta=25°C)

| 参数 Parameter | 符号 Symbol | 数值 Rating | 单位 Unit |
|--|------------------------|--------------|------------|
| Reverse Voltage | V_R | 75 | V |
| Peak Reverse Voltage | V_{RM} | 100 | V |
| Rectified Current (Average) | I_O | 150 | mA |
| Forward Continuous Current | I_{FM} | 300 | mA |
| Surge Forward Current | $I_{FSM} (t=1.0\mu s)$ | 2.0 | A |
| | $I_{FSM} (t=1.0s)$ | 1.0 | A |
| Power Dissipation | P_{tot} | 400 | mW |
| Junction Temperature | T_j | 150 | °C |
| Storage Temperature Range | T_{stg} | -55~150 | °C |
| Thermal Resistance Junction to Ambient Air | $R_{\theta JA}$ | 450 | °C/W |

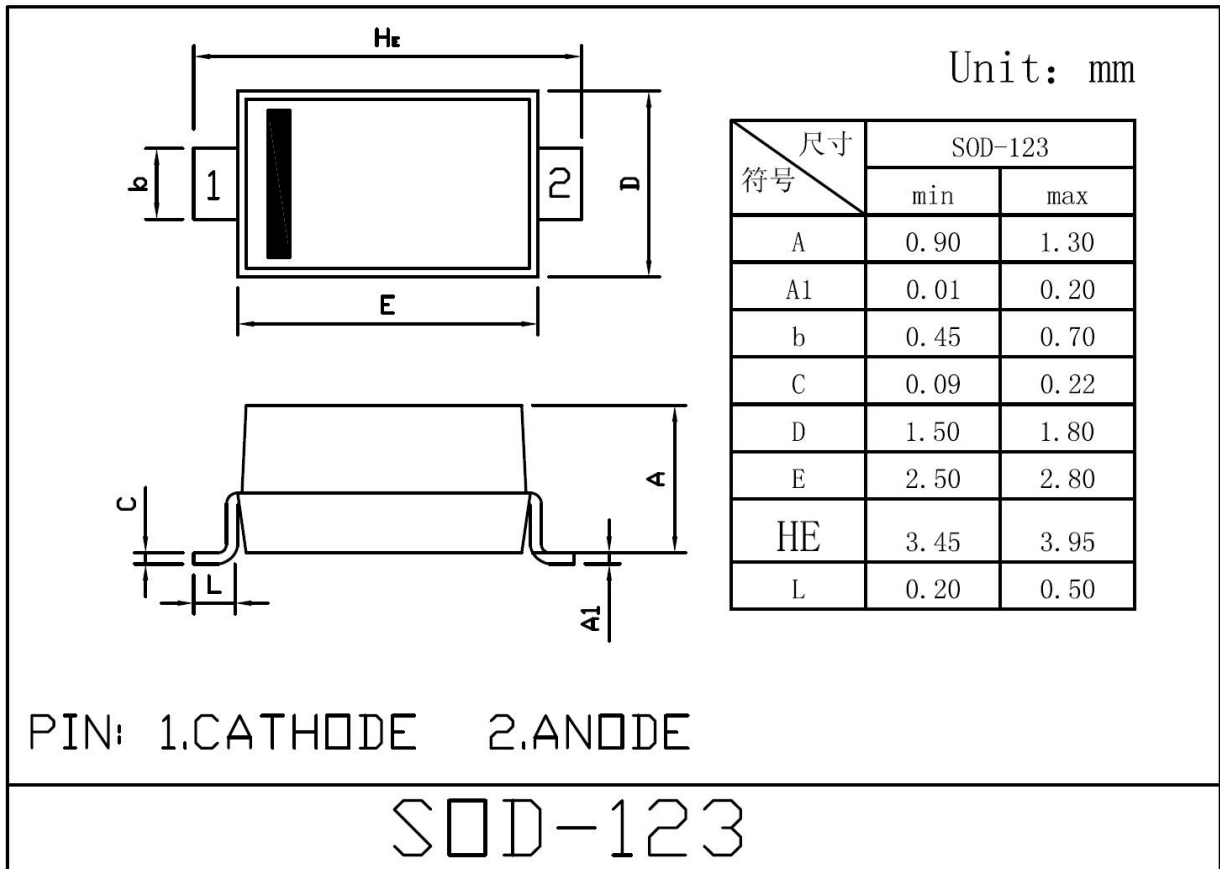
电性能参数 / Electrical Characteristics(Ta=25°C)

| 参数 Parameter | 符号 Symbol | 测试条件 Test Conditions | 最小值 Min | 典型值 Typ | 最大值 Max | 单位 Unit |
|---------------------------------------|--------------|--|------------|------------|------------|------------|
| Forward Voltage | V_F | $I_F=10mA$ | | | 1.0 | V |
| Instantaneous Reverse Current | I_R | $V_R=20V$ | | | 25 | nA |
| | | $V_R=75V$ | | | 5 | μA |
| | | $V_R=20V \quad T_j=150^\circ C$ | | | 50 | μA |
| Capacitance | C_{tot} | $V_F=V_R=0V$ | | | 4 | pF |
| Reverse Recovery Time | t_{rr} | $I_F=10mA \quad V_R=6.0V$ $I_R=1mA \quad R_L=100\Omega$ | | | 4 | ns |
| Voltage Rise when Switching On tested | V_{fr} | $t_p=0.1\mu s \quad f_p=5to100kHz$ Time<30ns | | | 2.5 | V |
| Total Capacitance | C_T | $V_R=0 \quad f=1.0MHz$ | | | 5.0 | 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

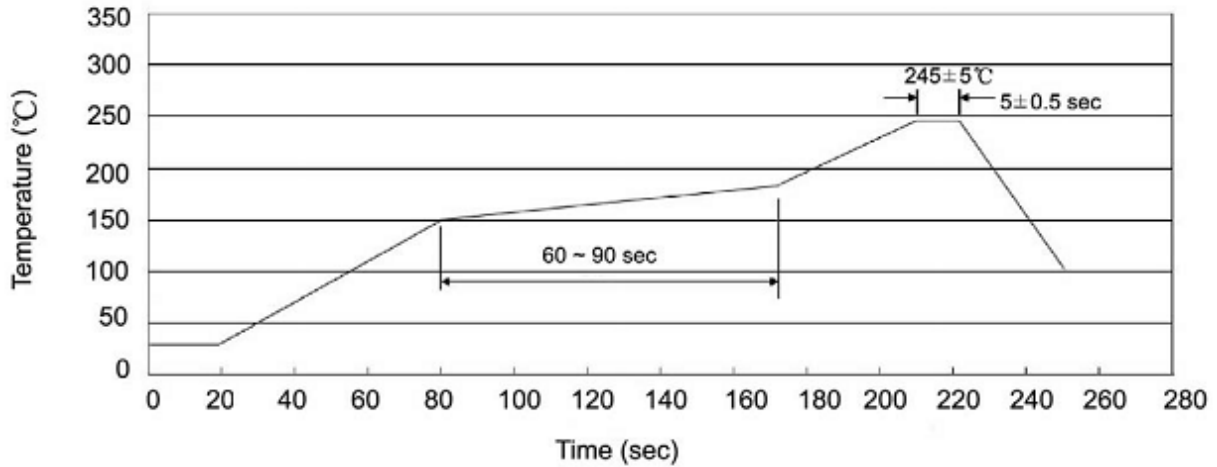
A2： 为型号代码

Note:

H: Company Code.

A2: 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 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 |
| SOD-123 | 3,000 | 10 | 30,000 | 6 | 180,000 | 7" ×8 | 180×120×180 | 390×385×205 |

使用说明 / Notices