

描述 / Descriptions

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

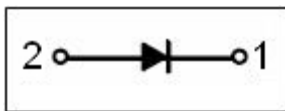
特征 / Features

平面工艺，高温漏电电流极小，可靠性较高。
Planar technology, high temperature leakage current is very small, and high reliability.

用途 / Applications

LED 照明、充电器和一体化节能灯等整流电路中。
LED lighting, chargers and integrated energy-saving lamps and other rectifier circuit.

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

| | | |
|---------|---------|---------|
| Model | 2CZ4004 | 2CZ4005 |
| Marking | HZ4 | HZ5 |

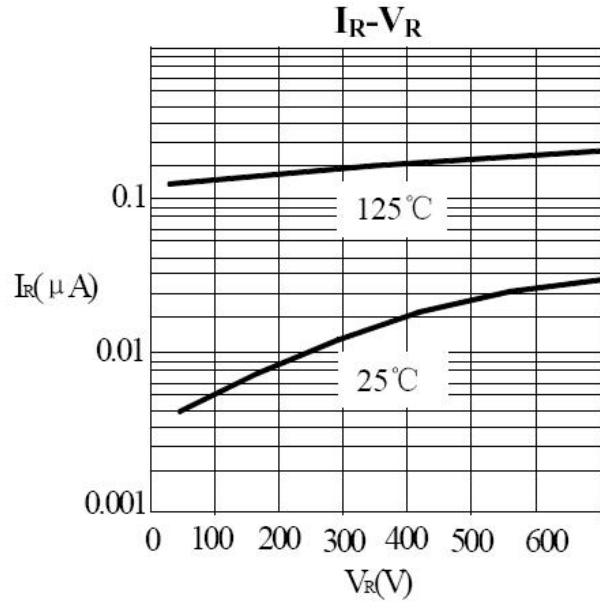
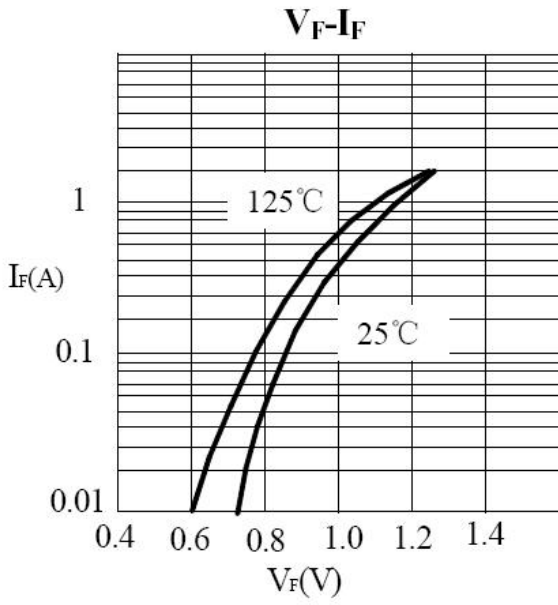
极限参数 / Absolute Maximum Ratings(Ta=25°C)

| 参数 Parameter | 符号 Symbol | 数值 Rating | | 单位 Unit |
|--|-------------------|--------------|---------|------------|
| | | 2CZ4004 | 2CZ4005 | |
| Peak Reverse Voltage | V_{RM} V_{DC} | 400 | 600 | V |
| Forward Continuous Current | $I_{F(AV)}$ | 1 | | A |
| Forward Continuous Current | I_{FM} | 2 | | A |
| Non-Repetitive Peak Forward Surge Current | I_{FSM} | 7.5 | | A |
| Power Dissipation | P_D | 500 | | mW |
| Typical Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 250 | | °C/W |
| Junction and Storage Temperature Range | T_j, T_{STG} | -55 ~ +150 | | °C |

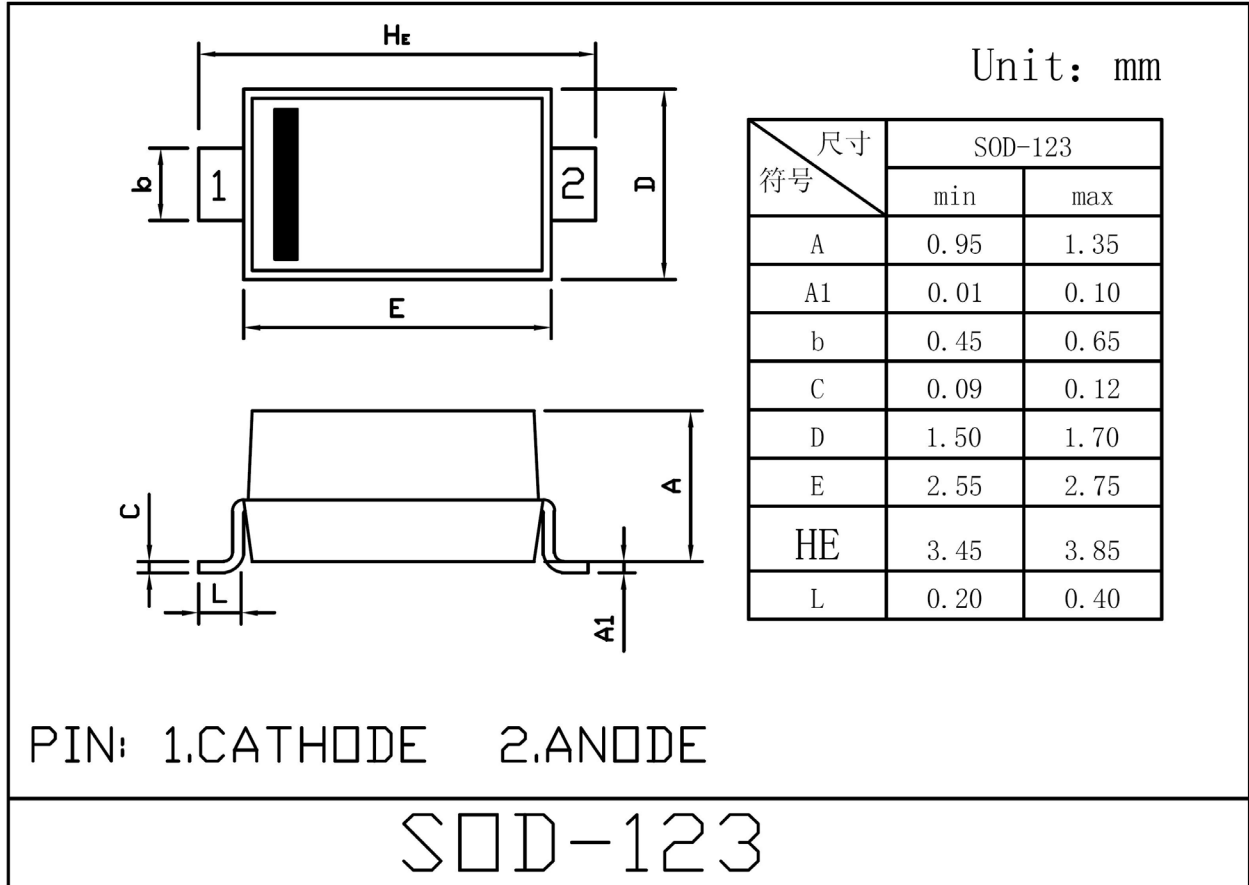
电性能参数 / Electrical Characteristics(Ta=25°C)

| 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 |
|---------------------------------------|--------------|---------------------------------|------------|------------|------------|------------|
| Reverse Breakdown Voltage | $V_{(BR)}$ | $I_R=1mA$ | 400 | | | V |
| | | | 600 | | | |
| Instantaneous Reverse Current | I_R | $V_R=V_{RRM}$ $T_a=25^\circ C$ | | | 0.5 | μA |
| | | $V_R=V_{RRM}$ $T_a=125^\circ C$ | | | 2 | |
| Voltage Rise when Switching On tested | V_F | $I_F=0.5A$ | | | 1.2 | V |
| Total Capacitance | C_{tot} | $V_R=4V$ $f=1MHz$ | | | 10 | 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

Z4： 为型号代码

Note:

H: Company Code.

Z4: 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 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 |
| SOD-123 | 3,000 | 10 | 30,000 | 8 | 240,000 | 7" ×8 | 180×120×180 | 385×257×392 |

使用说明 / Notices