

## ■ 描述 DESCRIPTIONS

SOD-123 塑封封装二极管。Diode in a SOD-123 Plastic Package.

## ■ 应用 APPLICATIONS

高速开关应用。High-speed Switching Applications.

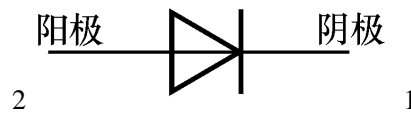
## ■ 引脚说明 PIN ASSIGNMENT



1 CATHODE

2 ANODE

## ■ 内部等效电路 Equivalent Circuit



## ■ 型号构成 Name rule

| 基本名称<br>Name   |                |                | 辅助识别代码<br>Additional code |                   |                 |                                      |
|----------------|----------------|----------------|---------------------------|-------------------|-----------------|--------------------------------------|
| 第一部分<br>Part 1 | 第二部分<br>Part 2 | 第三部分<br>Part 3 | 第四部分<br>Part 4            | 第五部分<br>Part 5    | 第六部分<br>Part 6  | 第七部分<br>Part 7                       |
| 品牌<br>Brand    | 产品类别<br>Type   | 产品型号<br>Model  | 分档<br>Value               | 分隔号<br>Separatrix | 封装代码<br>Package | 附加码 (备用)<br>Extra-code               |
| FH             |                | 1N4148W        |                           | “—”               | J: SOD-123      | E : ROHS<br>G: 绿色封装<br>Green Package |

**■ 额定值 ABSOLUTE MAXIMUM RATINGS (TC=25°C unless otherwise noted)**

| 特性参数<br>Characteristic                    |        | 符号<br>Symbol | 额定值<br>Rating | 单位<br>Unit |
|---|--------|--------------|---------------|------------|
| 反向电压<br>Reverse Voltage                   |        | VR           | 75            | V          |
| 峰值反向电压<br>Peak Reverse Voltage            |        | VRM          | 100           | V          |
| 均方根反向电压                                   |        | VR(RMS)      | 53            | V          |
| 正向连续电流<br>Forward Continuous Current      |        | IFD          | 300           | mA         |
| 工作电流<br>Average Forward Current           |        | IO           | 150           | mA         |
| 正向不重复浪涌电流<br>Surge Current                | @t=1uS | IFSM         | 2             | A          |
|   | @t=1S  |              | 1             |            |
| 耗散功率<br>Power Dissipation                 |        | PD           | 200           | mW         |
| 热阻(结到环境空气)<br>Thermal Resistance (J to A) |        | RthJA        | 315           | °C/W       |
| 结温<br>Junction Temperature                |        | TJ           | 150           | °C         |
| 贮存温度<br>Storage Temperature               |        | Tstg         | -65~150       | °C         |

**■ 电特性 ELECTRICAL CHARACTERISTICS**

(TA=25°C unless otherwise noted 如无特殊说明, 温度为 25°C)

| 特性参数<br>Characteristic              | 符号<br>Symbol | 测试条件<br>Test Conditions                   | 最小值<br>Min. | 典型值<br>Typ. | 最大值<br>Max. | 单位<br>Unit. |
|-------------------------------------|--------------|---|-------------|-------------|-------------|-------------|
| 反向击穿电压<br>Reverse Breakdown Voltage | V(BR)R       | IR= 1.0uA                                 | 75          | —           | —           | V           |
| 正向压降<br>Forward Voltage             | VF(1)        | IF= 1mA                                   | —           | —           | 0.715       | V           |
|                                     | VF(2)        | IF= 10mA                                  | —           | —           | 0.855       | V           |
|                                     | VF(3)        | IF= 50mA                                  | —           | —           | 1.0         | V           |
|                                     | VF(4)        | IF= 150mA                                 | —           | —           | 1.25        | V           |
| 反向电流<br>Reverse Current             | IR(1)        | VR= 20V                                   | —           | —           | 25          | nA          |
|                                     | IR(2)        | VR= 75V                                   | —           | —           | 1.0         | uA          |
|                                     | IR(3)        | VR=25V,TJ = 150°C                         | —           | —           | 30          | uA          |
|                                     | IR(4)        | VR=75V,TJ = 150°C                         | —           | —           | 50          | uA          |
| 总电容<br>Total Capacitance            | CT           | VR= 0, f= 1.0MHz                          | —           | —           | 2.0         | pF          |
| 反向恢复时间<br>Reverse Recovery Time     | trr          | IF= IR= 10mA,<br>Irr = 0.1 x IR, RL= 100Ω | —           | —           | 4.0         | nS          |

■ 典型特性 TYPICAL CHARACTERISTICS

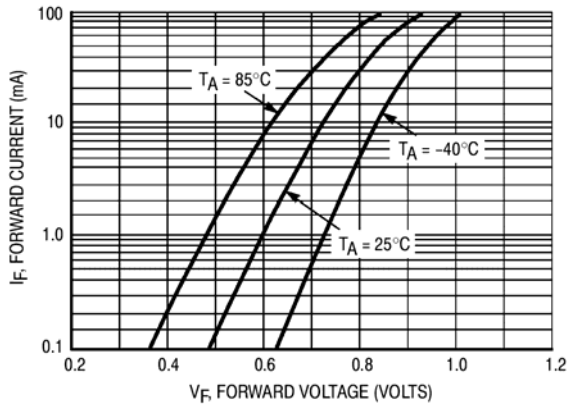


Fig.1  $I_F—V_F$

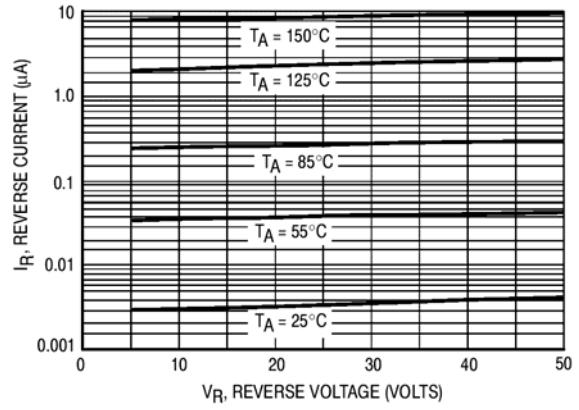


Fig.2  $I_R—V_R$

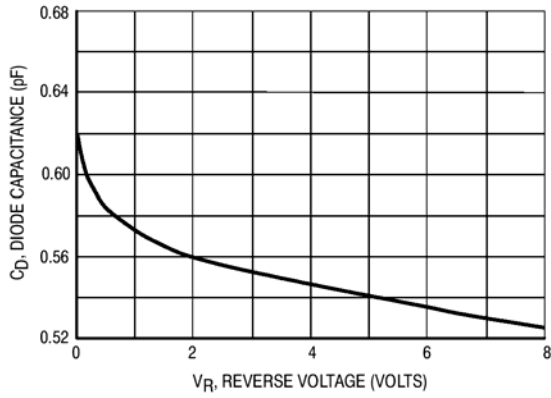
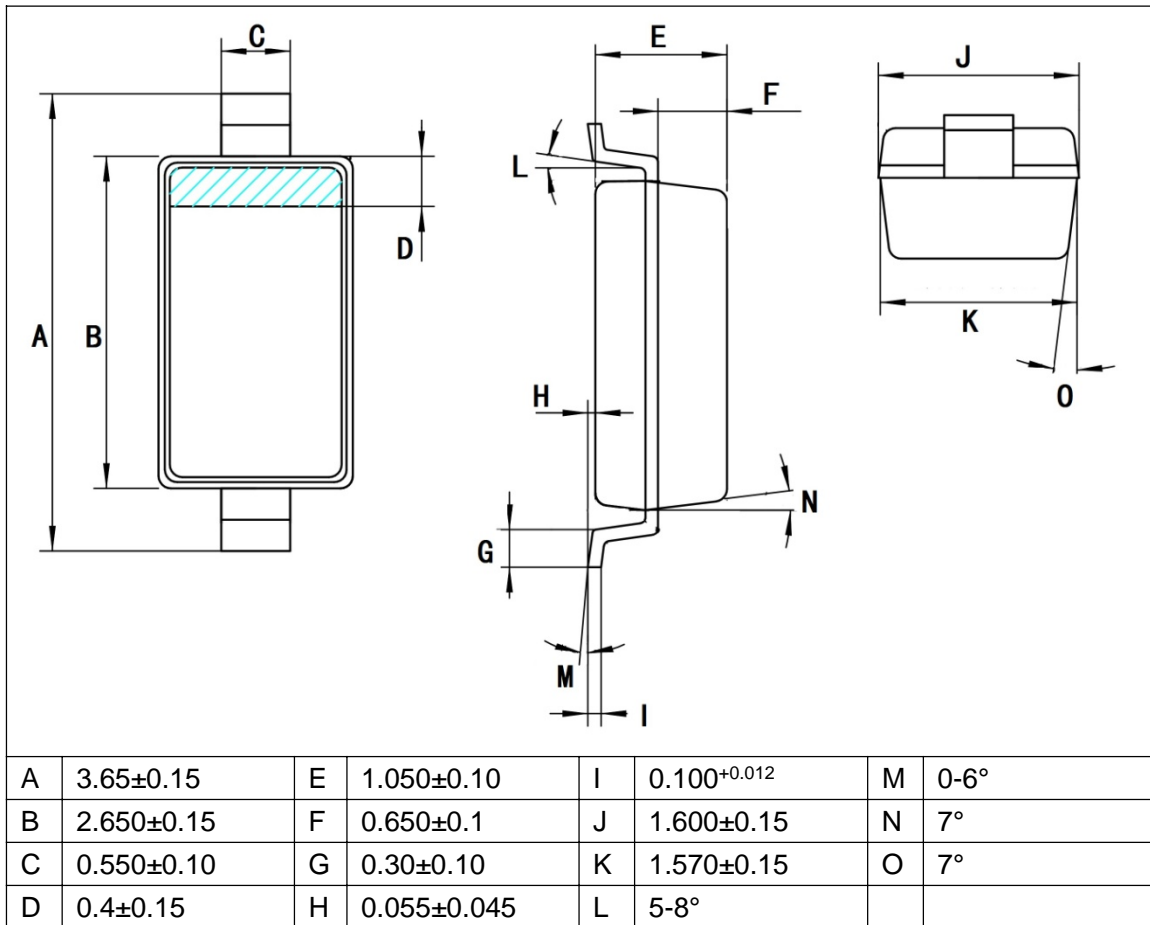


Fig.3  $C_T—V_R$

**■ 外形尺寸 DIMENSION**

**■ 打标 DEVICE MARKING**


单击下面可查看定价，库存，交付和生命周期等信息

[>>FH\(风华高科\)](#)