

### 描述 / Descriptions

SOD-523 塑封封装 硅半导体二极管。  
Silicon Diode in a SOD-523 Plastic Package.

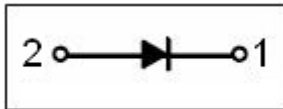
### 特征 / Features

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

### 印章代码 / Marking

Marking	T4
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**极限参数 / Absolute Maximum Ratings(Ta=25°C)**

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Maximum RMS voltage	$V_{RMS}$	75	V
Continuous Forward Current	$I_F$	150	mA
Non-reptitive Peak Forward Surge Current	$I_{FSM}$ (t=1ms)	0.8	A
Power Dissipation	$P_{tot}$	150	mW
Junction Temperature	$T_j$	-55~150	°C
Storage Temperature Range	$T_{stg}$	-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	$V_{(BR)R}$	$I_R=1\mu A$	75			V
Forward Voltage	$V_F$	$I_F=1mA$			0.715	V
		$I_F=10mA$			0.855	V
		$I_F=50mA$			1.00	
		$I_F=150mA$			1.25	
Instantaneous Reverse Current	$I_R$	$V_R=20V$ $T_j = 25\text{ }^\circ\text{C}$			0.025	$\mu A$
		$V_R=75V$ $T_j = 25\text{ }^\circ\text{C}$			1	
Junction Capacitance	$C_j$	$V_R=0V$ $f=1MHz$			2	pF
Maximum Reverse Recovery Time	$t_{rr}$	$I_F = 10mA$ $I_R = 10mA$ $I_{rr} = 1mA$ $R_L=100\ \Omega$			4	ns

电参数曲线图 / Electrical Characteristic Curve

Fig.1 Power Derating Curve

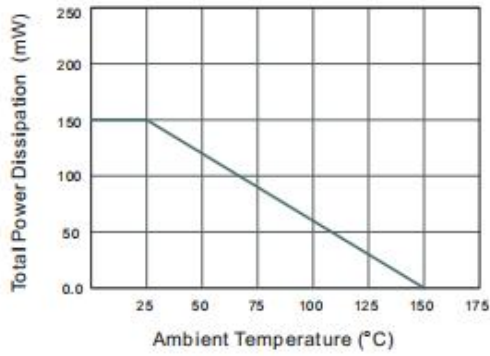


Fig.2 Typical Reverse Characteristics

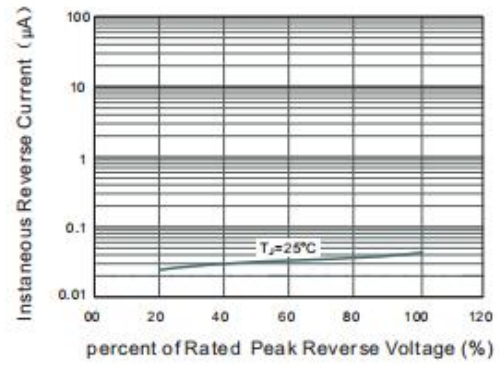


Fig.3 Typical Instantaneous Forward Characteristics

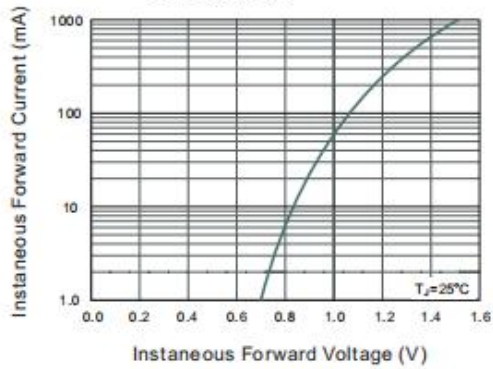
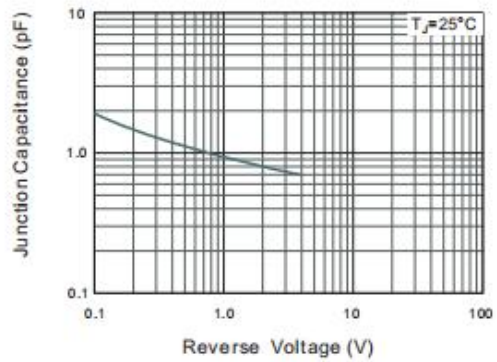
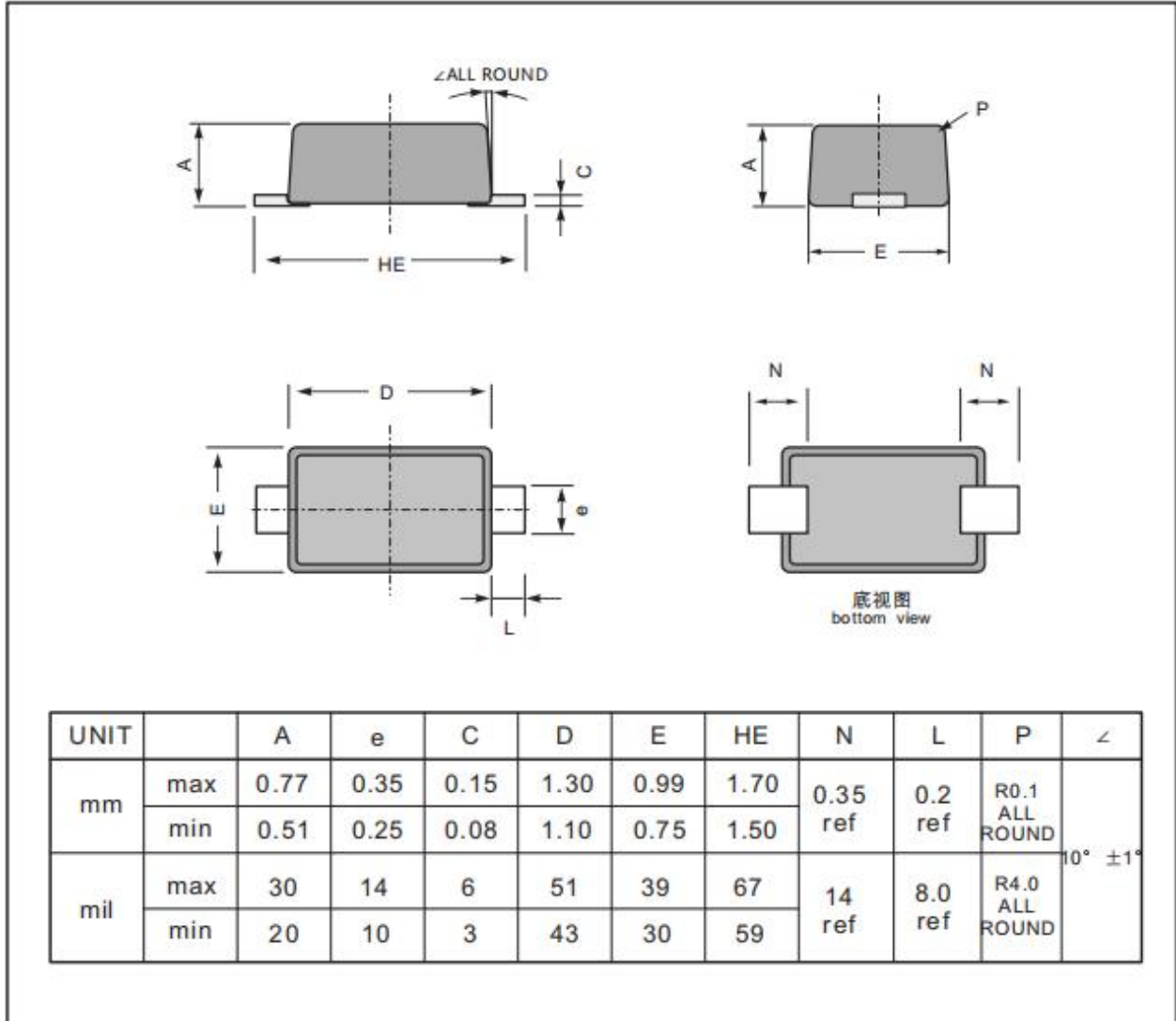


Fig.4 Typical Junction Capacitance

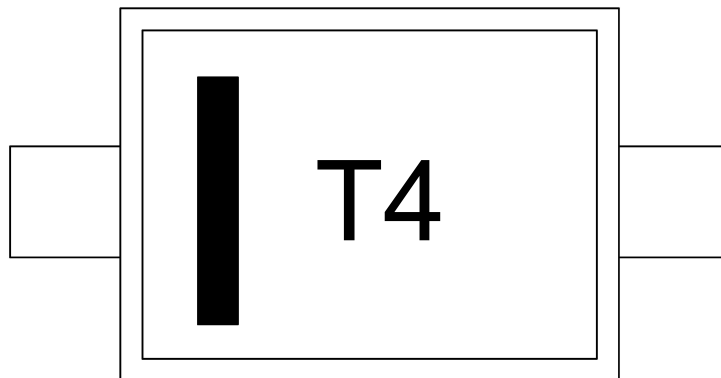


外形尺寸图 / Package Dimensions

SOD-523



印章说明 / Marking Instructions



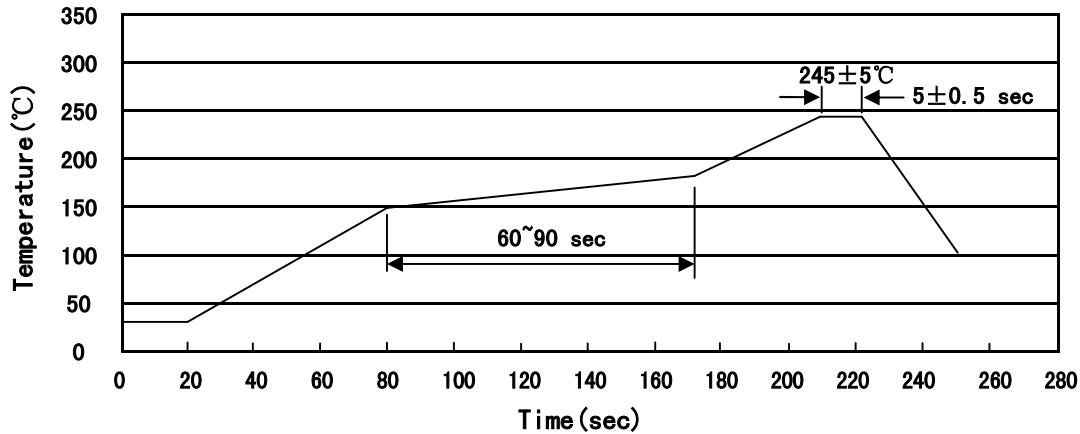
说明：

T4： 为型号代码

Note:

T4: 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 <sup>3</sup> )		
	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-523	3,000	10	30,000	6	180,000	7" ×8	180×120×180	390×385×205

**使用说明 / Notices**