

### 描述 / Descriptions

SOD-323 塑封封装 硅半导体二极管。  
Silicon Diode in a SOD-323 Plastic Package.

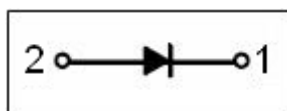
### 特征 / Features

小信号二极管。无卤产品。  
Small signal diode . HF Product.

### 用途 / Applications

用于开关电路。  
Switching diodes.

### 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	A6H
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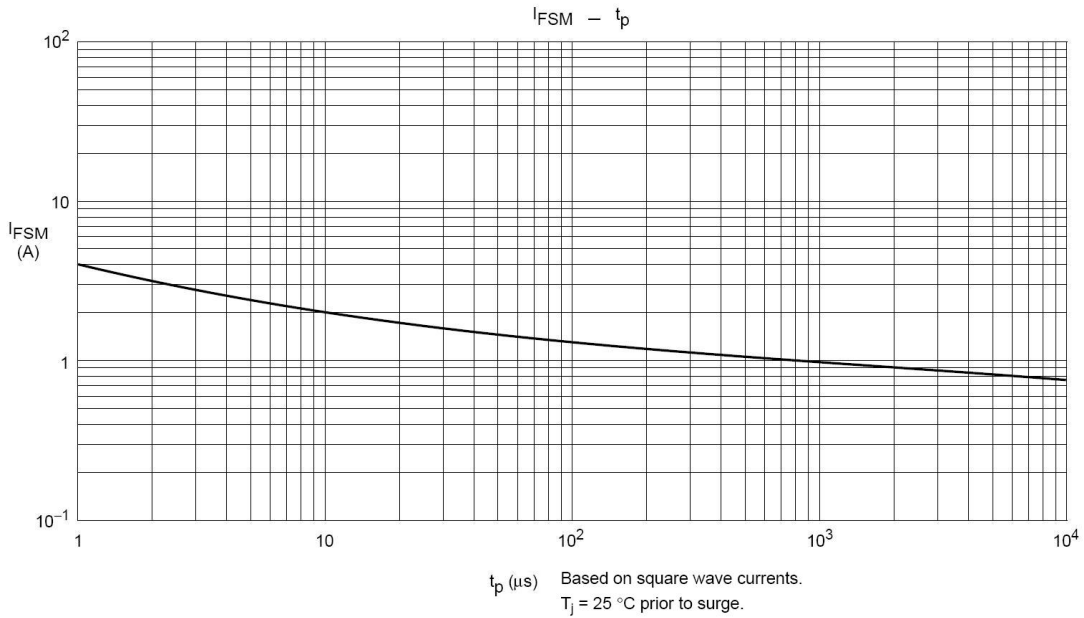
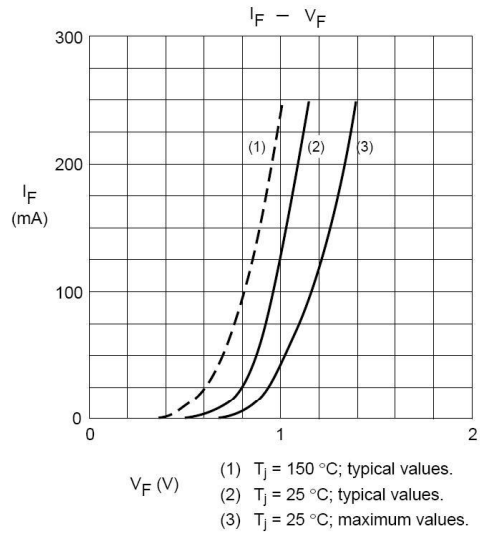
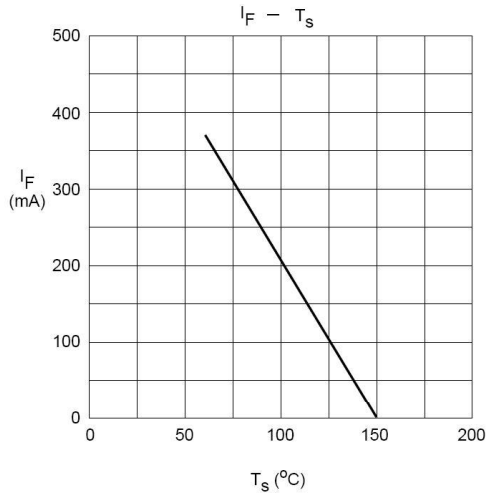
**极限参数 / Absolute Maximum Ratings(Ta=25°C)**

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Repetitive peak reverse voltage	$V_{RRM}$	85	V
Continuous forward current	$I_{F(AV)}$ (Ts=90°C)	250	mA
Non-repetitive peak forward current	$I_{FSM(1)(t=1S)}$	0.5	A
	$I_{FSM(2)(t=1mS)}$	1.0	A
Total power dissipation	$P_{tot}$ (Ts=90°C)	400	mW
Thermal resistance from junction to soldering point	$R_{\theta J-S}$	150	K/W
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-65~150	°C

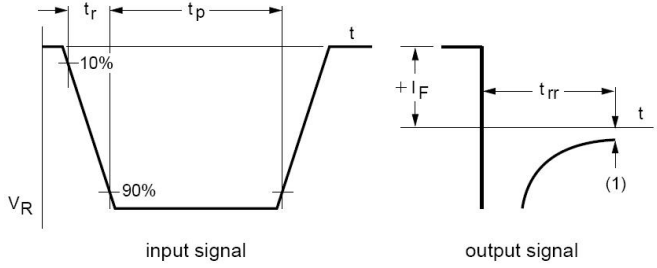
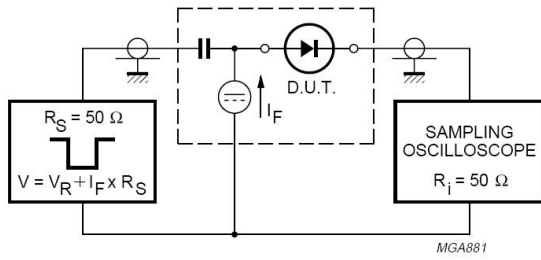
**电性能参数 / Electrical Characteristics(Ta=25°C)**

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
Forward Voltage	$V_F$	$I_F=1mA$			715	mV
		$I_F=10mA$			855	mV
		$I_F=50mA$			1.0	V
		$I_F=150mA$			1.25	V
Reverse Current	$I_R$	$V_R=25V$			30	nA
		$V_R=75V$			1.0	μA
		$V_R=25V$ $T_j=150^\circ C$			30	μA
		$V_R=75V$ $T_j=150^\circ C$			50	μA
Diode capacitance	$C_d$	$V_R=0$ $f=1.0MHz$			1.5	pF
Reverse Recovery Time	$t_{rr}$	$I_F=1R=10mA$ $I_R=1.0mA$ $R_L=100\Omega$			4.0	ns
Forward recovery voltage	$V_{fr}$	$I_F=10mA$ $T_r=20ns$			1.75	V

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

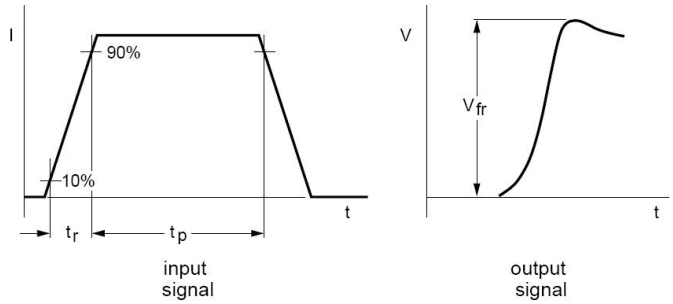
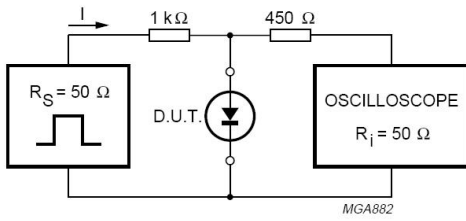


**测试电路和波形 / Test circuit and waveforms.**



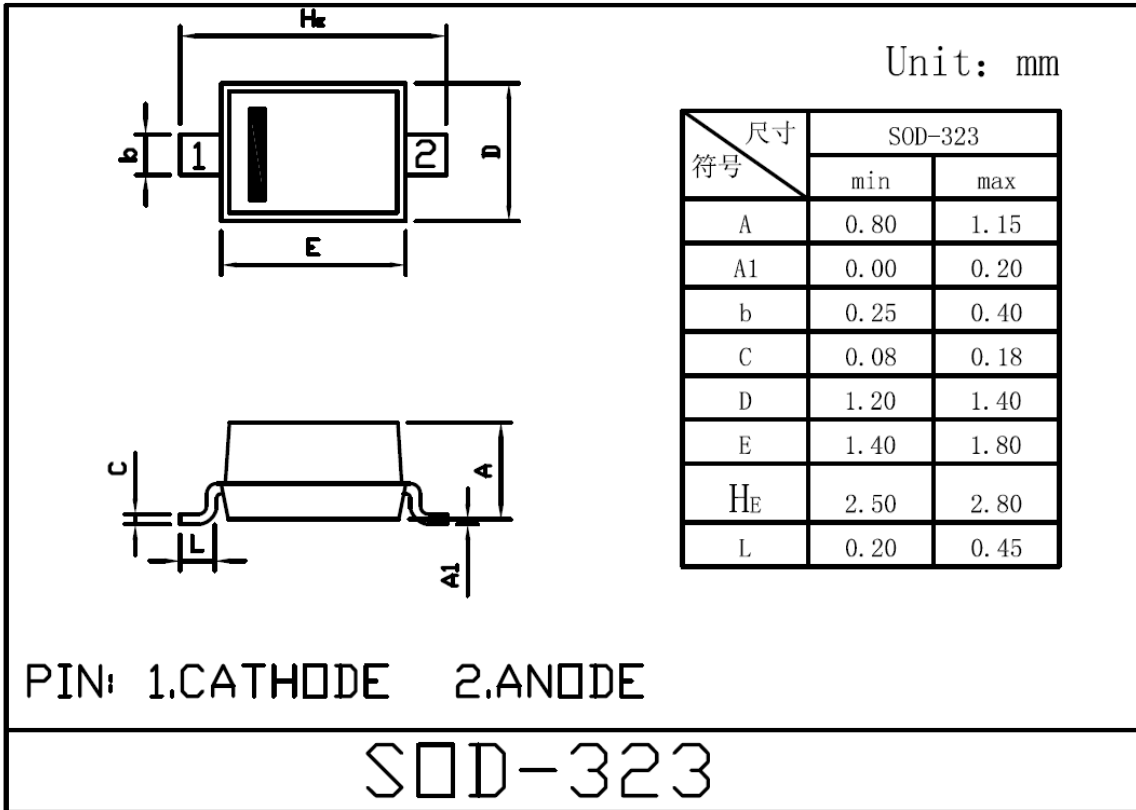
(1)  $I_R = 1 \text{ mA}$ .

Input signal: reverse pulse rise time  $t_r = 0.6 \text{ ns}$ ; reverse voltage pulse duration  $t_p = 100 \text{ ns}$ ; duty factor  $\delta = 0.05$ ;  
Oscilloscope: rise time  $t_r = 0.35 \text{ ns}$ .



Input signal: forward pulse rise time  $t_r = 20 \text{ ns}$ ; forward current pulse duration  $t_p \geq 100 \text{ ns}$ ; duty factor  $\delta \leq 0.005$ .

外形尺寸图 / Package Dimensions



印章说明 / Marking Instructions



说明：

A6： 为型号代码

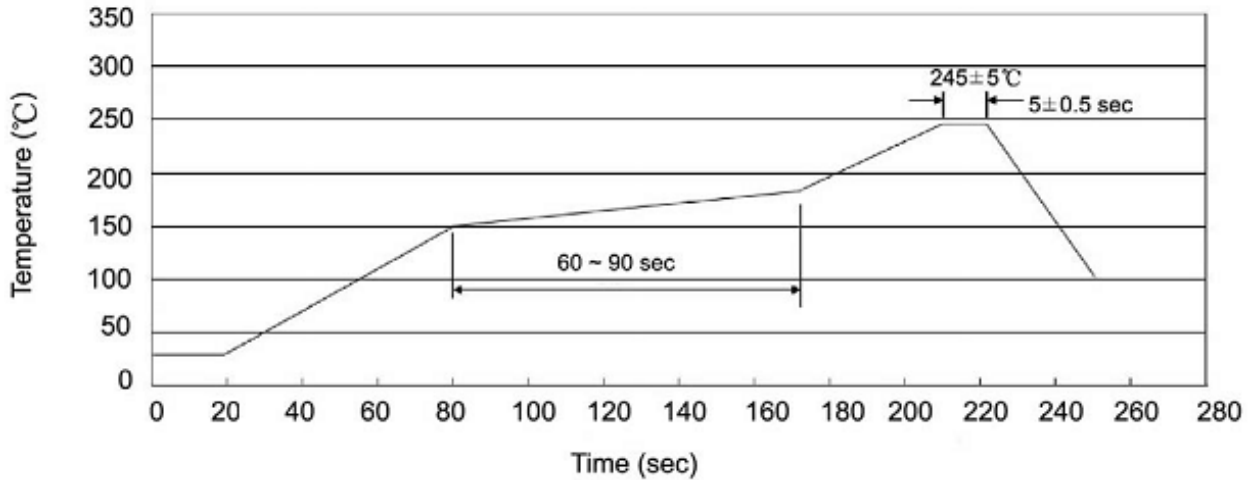
H： 为公司代码

Note:

A6: Product Type Code

H: Company Code

**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-323	3,000	10	30,000	6	180,000	7" ×8	180×120×180	390×385×205

**使用说明 / Notices**