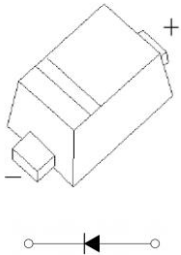


## SOD-523 贴片塑封二极管

## SOD-523 Plastic-Encapsulate Diodes

SOD-523



## 特征 Features

- 高速开关应用 High-Speed Switching Applications
- 引脚精加工: 100%哑光锡(锡) Lead Finish: 100% Matte Sn ( Tin )
- 回流焊温度: 260℃ Qualified Reflow Temperature: 260 °C
- 极小型SOD-523封装 Extremely Small SOD-523 Package

## 机械数据 Mechanical Data

- 封装: SOD-523 封装 SOD-523 Small Outline Plastic Package
- 极性: 色环端为负极 Polarity: Color band denotes cathode end
- 环氧树脂UL 易燃等级 Epoxy UL: 94V-0
- 安装位置: 任意 Mounting Position: Any

MARKING: A6



极限值和温度特性(TA = 25℃ 除非另有规定)

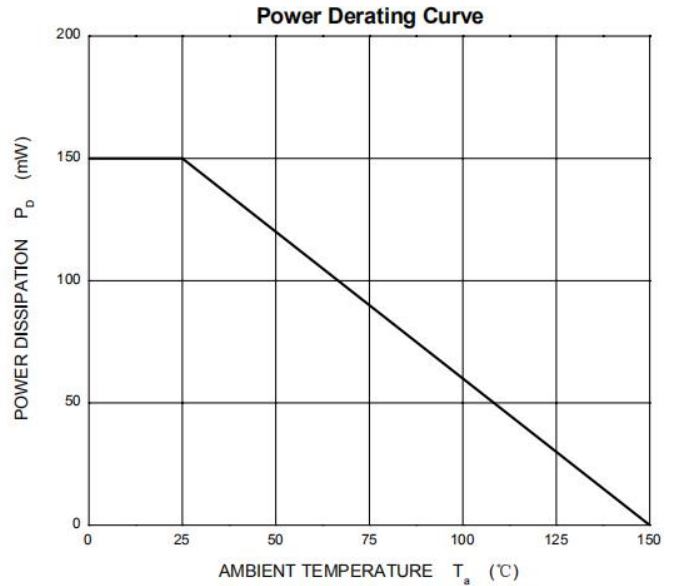
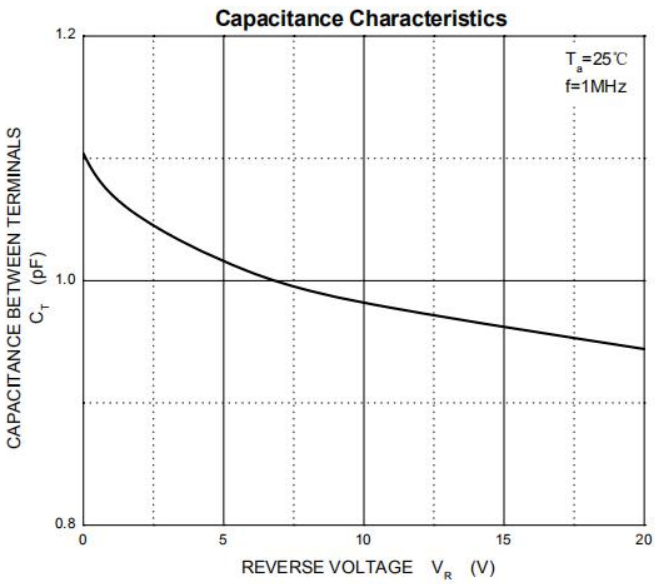
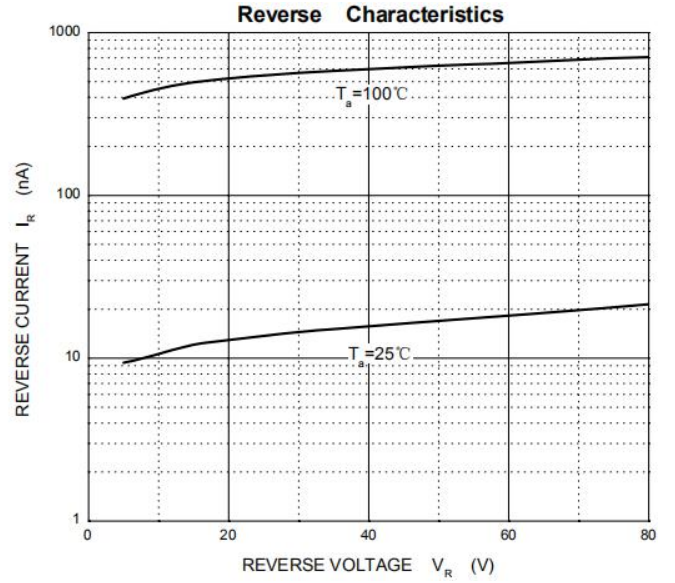
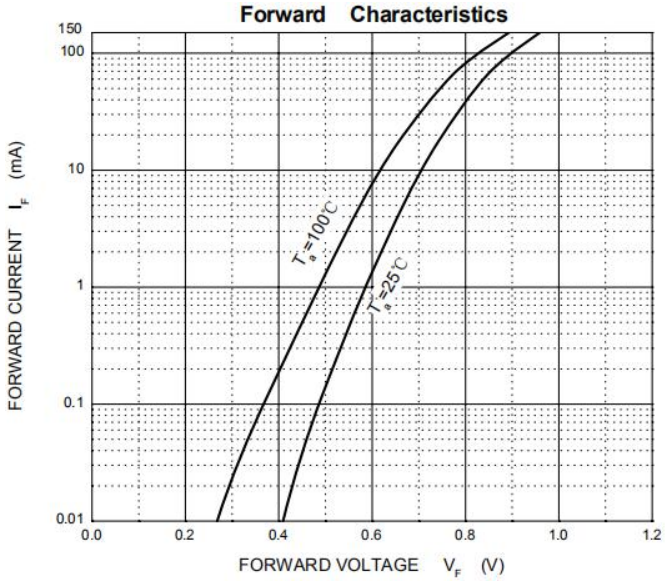
Maximum Ratings &amp; Thermal Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified.)

参数 Parameters	符号 Symbol	数值 Value	单位 Unit
反向电压 Reverse Voltage	V <sub>R</sub>	75	V
正向连续电流 Forward Continuous Current	I <sub>F</sub>	200	mA
尖峰正向不重复浪涌电流 Non-repetitive Peak Forward Surge Current @ t = 8.3ms	I <sub>FSM</sub>	2.0	A
功率消耗 Power Dissipation	P <sub>d</sub>	150	mW
结温 Junction temperature	T <sub>j</sub>	150	℃
存储温度 Storage temperature range	T <sub>STG</sub>	-55-+150	℃
热阻 Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	833	℃/W

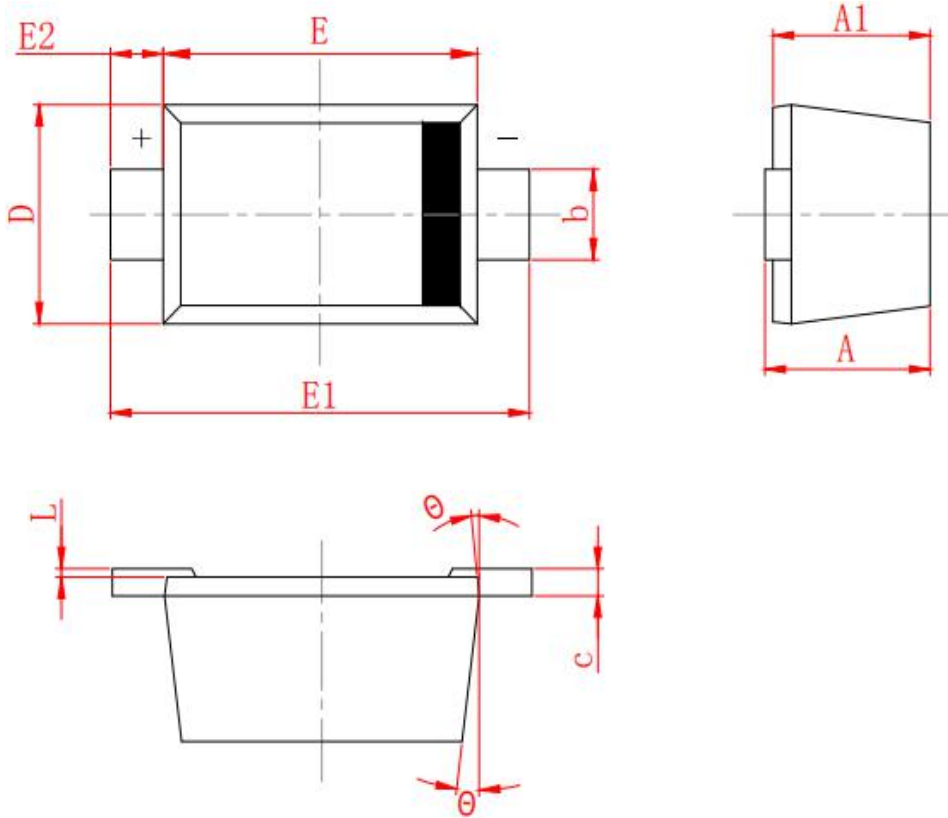
电特性 Electrical Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified.)

符号 Symbols	参数 Parameter	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
V(BR)	反向击穿电压 Reverse Breakdown Voltage	I <sub>R</sub> =100uA	75		V
I <sub>R</sub>	反向漏电流 Reverse Current	V <sub>R</sub> =75V	---	1	uA
V <sub>F</sub>	正向电压 Forward Voltage	I <sub>F</sub> =1mA	---	0.715	V
		I <sub>F</sub> =10mA	---	0.855	
		I <sub>F</sub> =50mA		1	
		I <sub>F</sub> =150mA		1.25	
V <sub>FR</sub>	正向恢复电压 Forward recovery voltage	I <sub>F</sub> =10mA, t <sub>r</sub> = 20ns		1.75	V
T <sub>RR</sub>	反向恢复时间 Reverse Recovery Time	I <sub>F</sub> = I <sub>R</sub> = 10mA,	---	6	nS
		R <sub>L</sub> =50Ω,			
C <sub>D</sub>	二极管结电容 Diode Capacitance	V <sub>R</sub> =0V, f=1MHZ	---	2	pF
Q <sub>S</sub>	储存电荷 Stored charge	I <sub>F</sub> =10mA, V <sub>R</sub> =5.0V ,R <sub>L</sub> =500Ω		45	pC

典型特性 Typical Characteristics

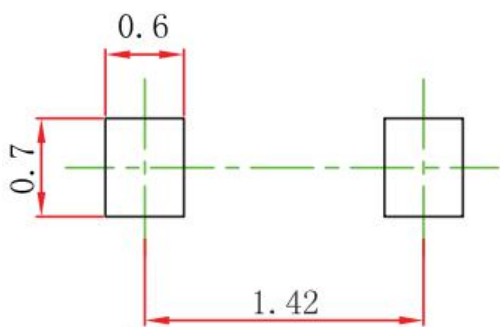


SOD-523封装外形尺寸图 SOD-523 Package Outline Dimensions



SYMBOL	MILLIMETER	
	MIN	MAX
A	0.530	0.730
A1	0.500	0.700
b	0.280	0.380
c	0.080	0.150
D	0.750	0.850
E	1.100	1.300
E1	1.500	1.700
E2	0.200 REF	
L	0.010	0.070
θ	7° REF	

SOD-523焊盘设计参考 SOD-523 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.