

## SOD-523 贴片塑封二极管 SOD-523 Plastic-Encapsulate Diodes

### 特征 Features

- 小表面贴装型 Small Surface Mounting Type
- 开关速度快 High Speed
- 高浪涌电流处理能力带来的高可靠性 High Reliability With High Surge Current Handling Capability

### 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: A



极限值和温度特性( $T_A = 25^\circ\text{C}$  除非另有规定)

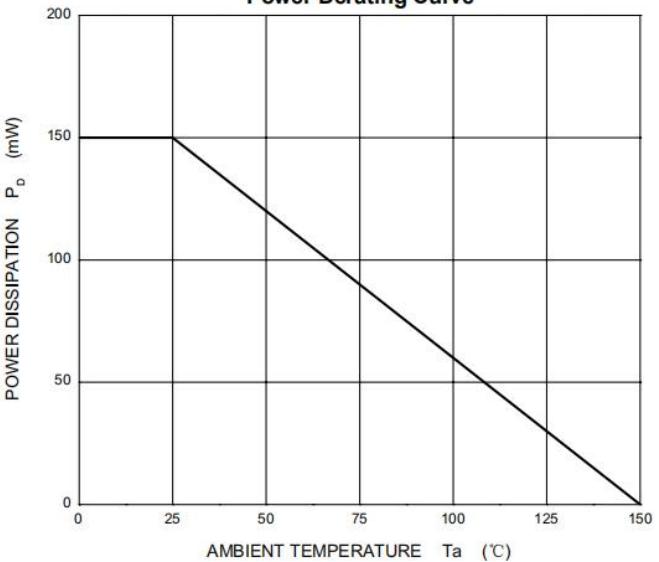
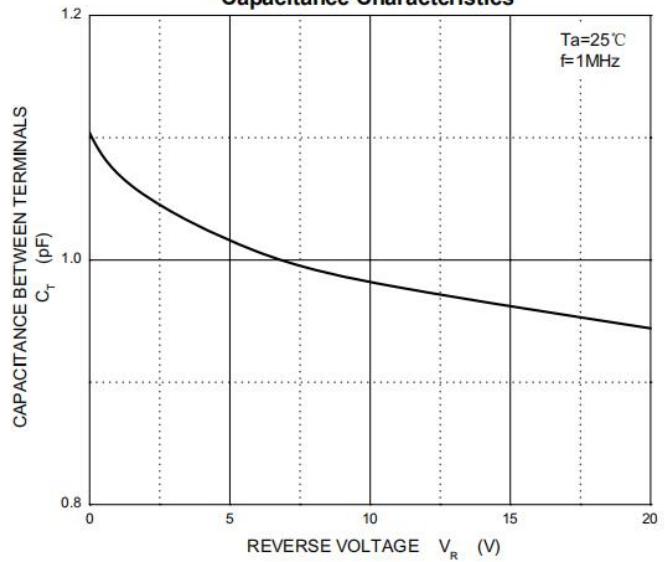
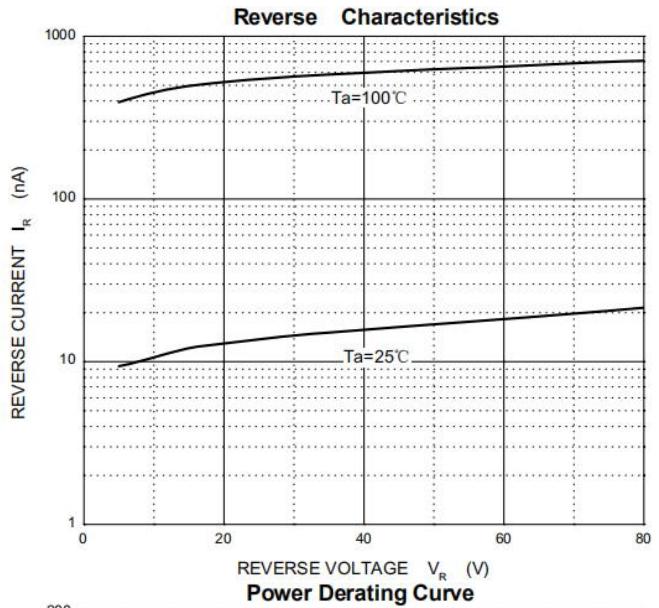
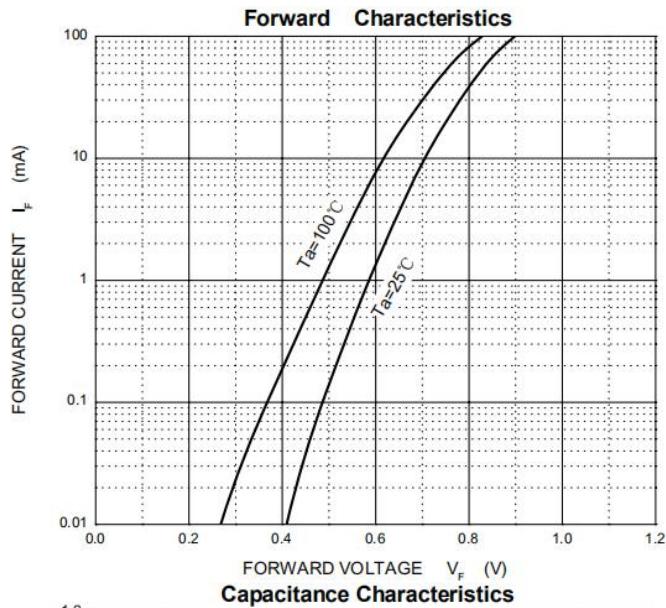
### Maximum Ratings & Thermal Characteristics (Ratings at $25^\circ\text{C}$ ambient temperature unless otherwise specified.)

参数 Parameters	符号 Symbol	数值 Value	单位 Unit
反向不重复峰值电压 Non-Repetitive Peak Reverse Voltage	$V_{RM}$	90	V
直流阻断电压 DC Blocking Voltage	$V_R$	80	V
平均整流输出电流 Average Rectified Output Current	$I_o$	100	mA
正向连续电流 Forward Continuous Current	$I_{FM}$	225	mA
尖峰正向不重复浪涌电流 Non-repetitive Peak Forward Surge Current@ $t= 8.3\text{ms}$	$I_{FSM}$	2.0	A
功率消耗 Power Dissipation	$P_d$	150	mW
结温 Junction temperature	$T_j$	150	°C
存储温度 Storage temperature range	$T_{STG}$	-55~+150	°C
热阻 Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	833	°C/W

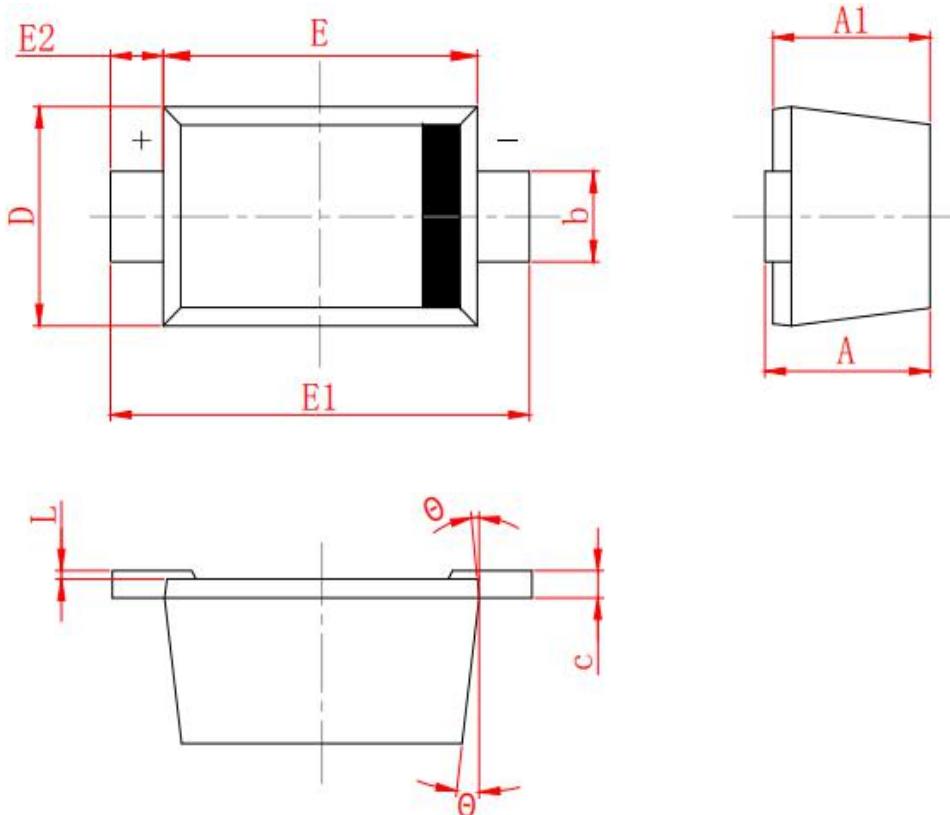
### 电特性 Electrical Characteristics (Ratings at $25^\circ\text{C}$ ambient temperature unless otherwise specified.)

符号 <b>Symbols</b>	参数 <b>Parameter</b>	测试条件 <b>Test Condition</b>	界限 Limits		单位 <b>Unit</b>
			Min	Max	
$V_F$	正向电压 Forward Voltage	$I_F=100\text{mA}$	---	1.2	V
$I_R$	反向漏电流 Reverse Current	$V_R = 80\text{V}$		0.1	uA
$T_{RR}$	反向恢复时间 Reverse Recovery Time	$V_R = 6\text{V},$	---	4	nS
		$I_F = 10\text{mA},$			
		$R_L=100\Omega,$			
C	结电容 Capacitance	$V_R=0.5\text{V}, f=1\text{MHz}$	---	3	pF

## 典型特性 Typical Characteristics

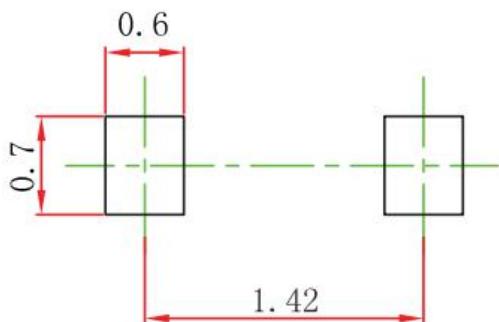


## SOD-523封装外形尺寸图 SOD-523 Package Outline Dimensions



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.