

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

特征 Features

- 小尺寸封装 Small Package
- 低反向电流 Low Reverse Current
- 开关速度快 Fast Switching Speed
- 适用于自动插件的理想的表贴封装 Surface Mount Package Ideally Suited for Automatic Insertion

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: T5



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

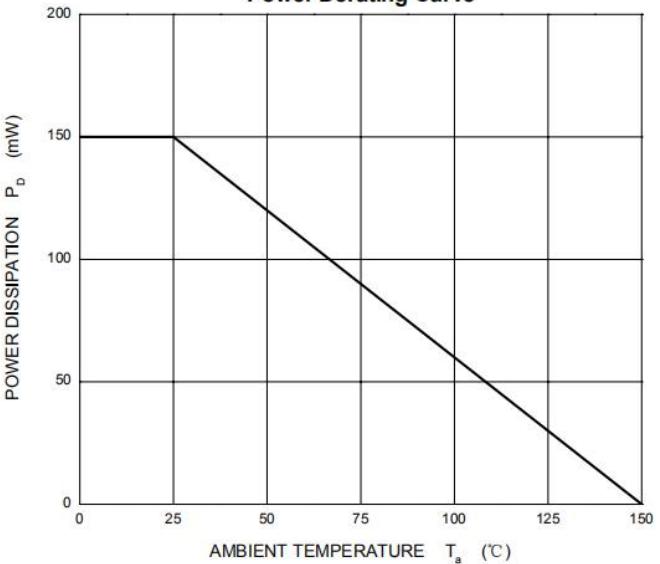
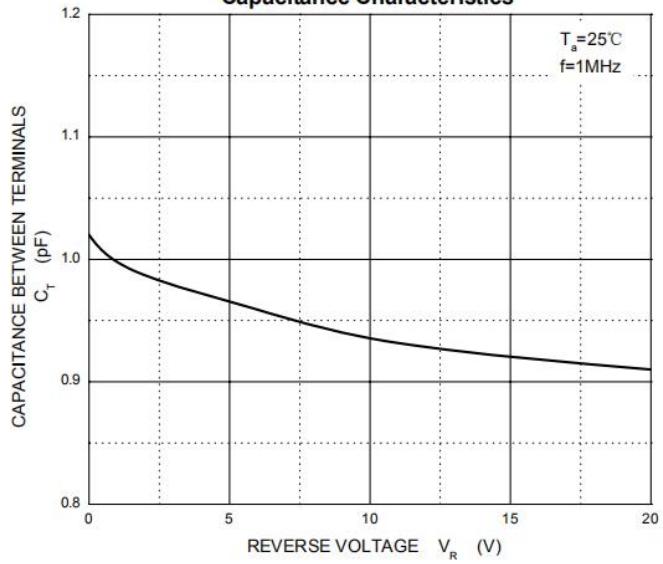
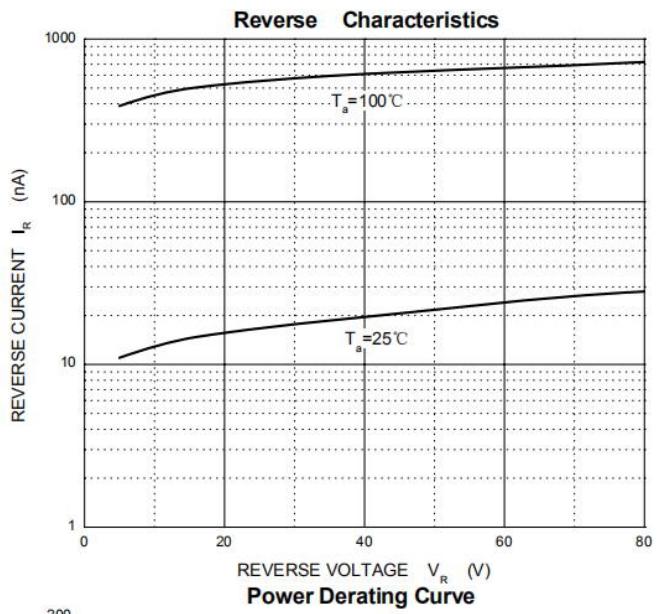
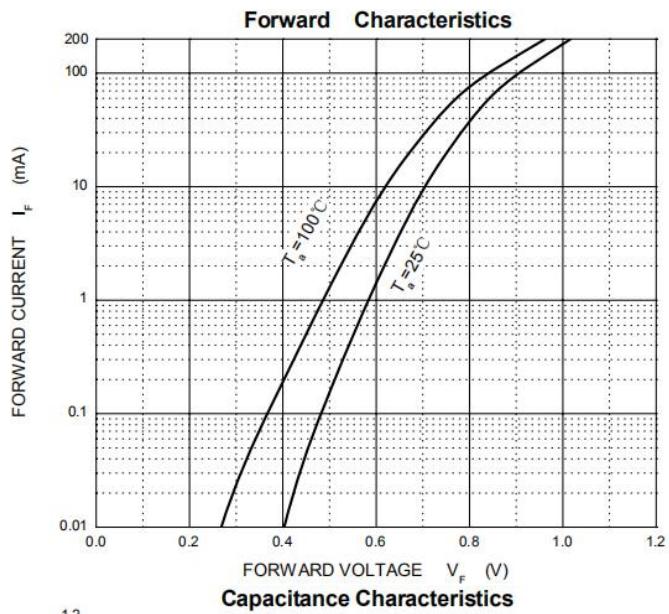
Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

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}	100	V
反向电压 Reverse Voltage	V_R		
峰值重复反向电压 Peak Repetitive Reverse Voltage	V_{RRM}	75	V
反向峰值工作电压 Working Peak Reverse Voltage	V_{RWM}		
均方根反向电压 RMS Reverse Voltage	$V_{R(RMS)}$	53	V
平均整流输出电流 Average Rectified Output Current	I_o	250	mA
正向连续电流 Forward Continuous Current	I_{FM}	500	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

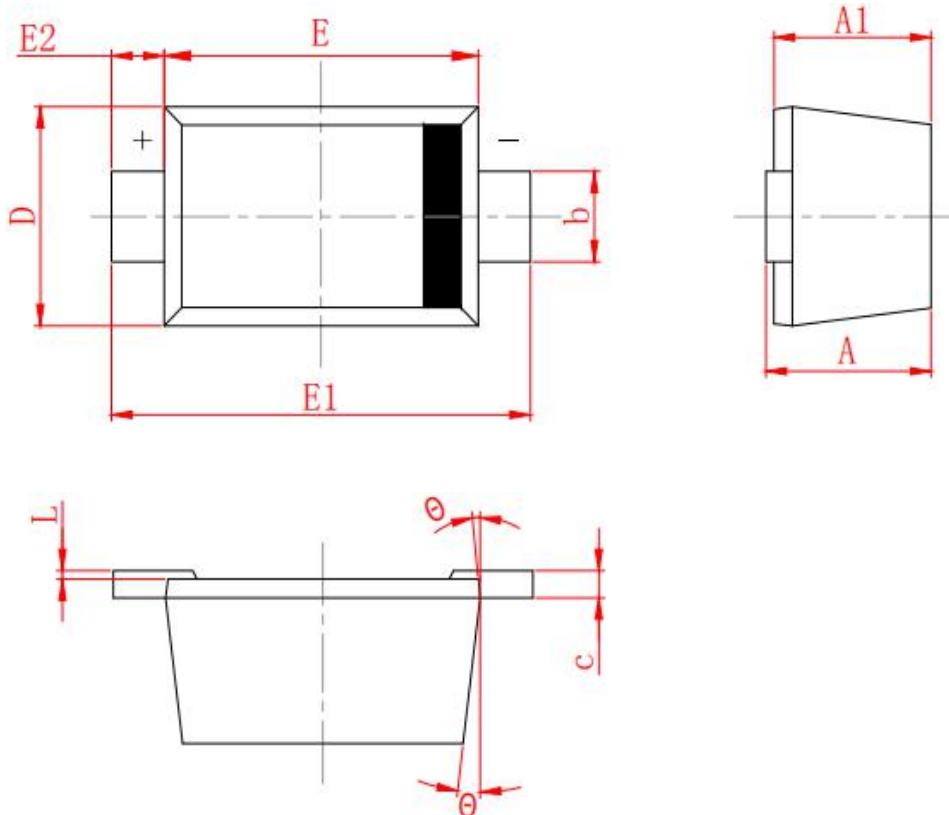
电特性 **Electrical Characteristics** (Ratings at 25°C ambient temperature unless otherwise specified).

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 Breakdown Voltage	$I_R=5\mu\text{A}$	75		V
		$I_R=100\mu\text{A}$	75		
I_R	反向漏电电流 Reverse Leakage Current	$VR=20\text{V}$	---	25	nA
		$VR=75$	---	1	
V_F	正向电压 Forward Voltage	$I_F=5\text{mA}$	---	0.715	V
		$I_F=10\text{mA}$	---	0.855	
		$I_F=50\text{mA}$		1	
		$I_F=150\text{mA}$		1.25	
T_{RR}	反向恢复时间 Reverse Recovery Time	$I_F = I_R = 10\text{mA},$	---	4	nS
		$I_{rr}=0.1*I_R,$			
		$R_L=100\Omega,$			
C	结电容 Capacitance	$VR=0\text{V}, f=1\text{MHz}$	---	4	pF

典型特性Typical Characteristics

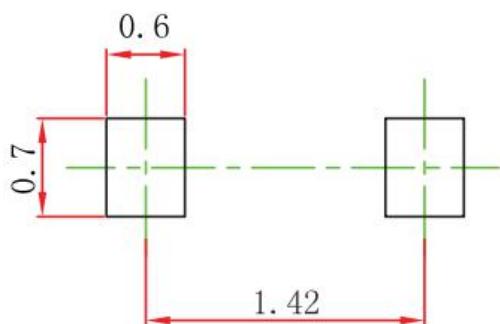


SOD-523封装外形尺寸图 SOD-523 Package Outline Dimensions



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: ± 0.05 mm.
3. The pad layout is for reference purposes only.