
MARKING: T4

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

SOD-523 贴片塑封二极管
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

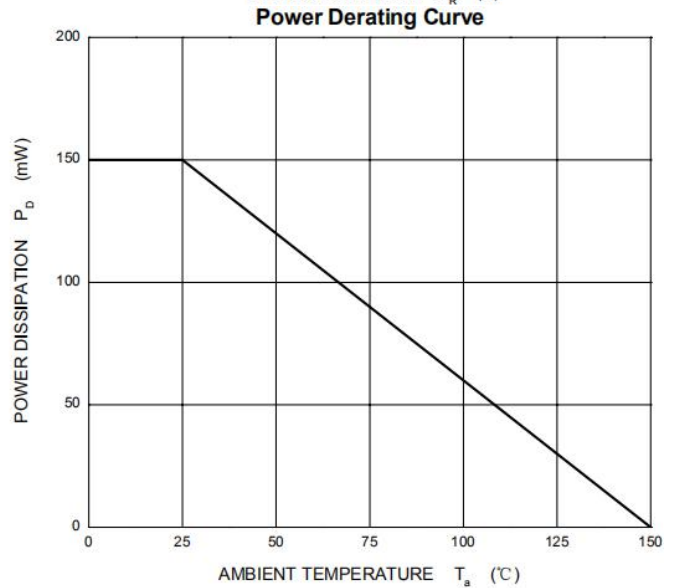
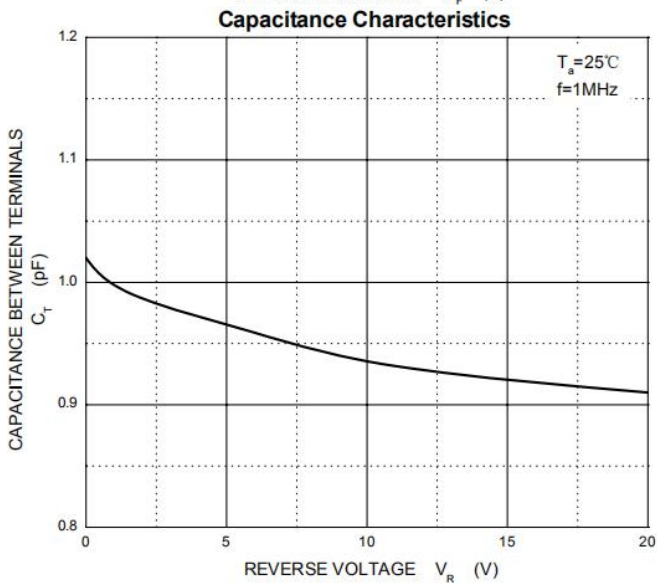
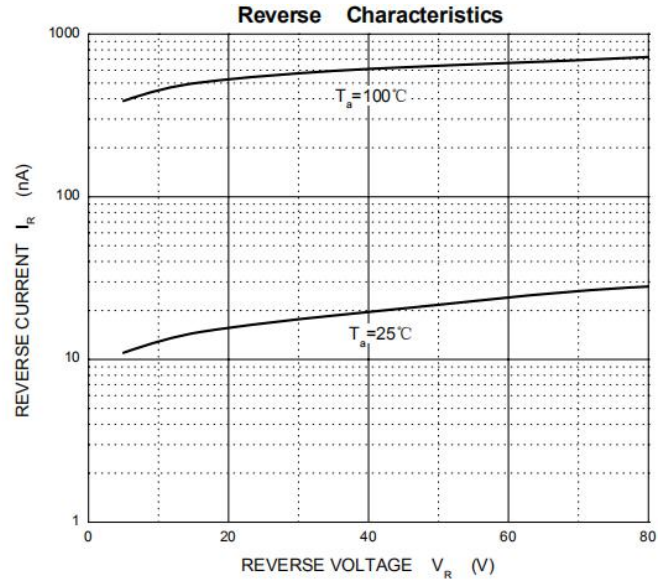
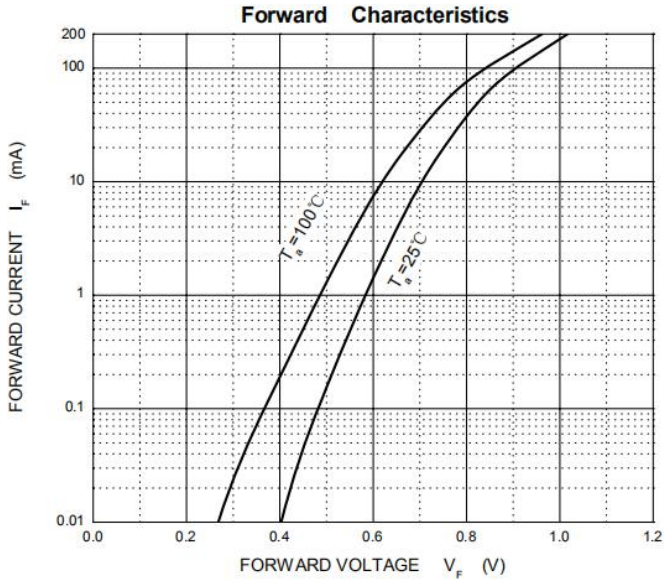
极限值和温度特性(TA = 25°C 除非另有规定)

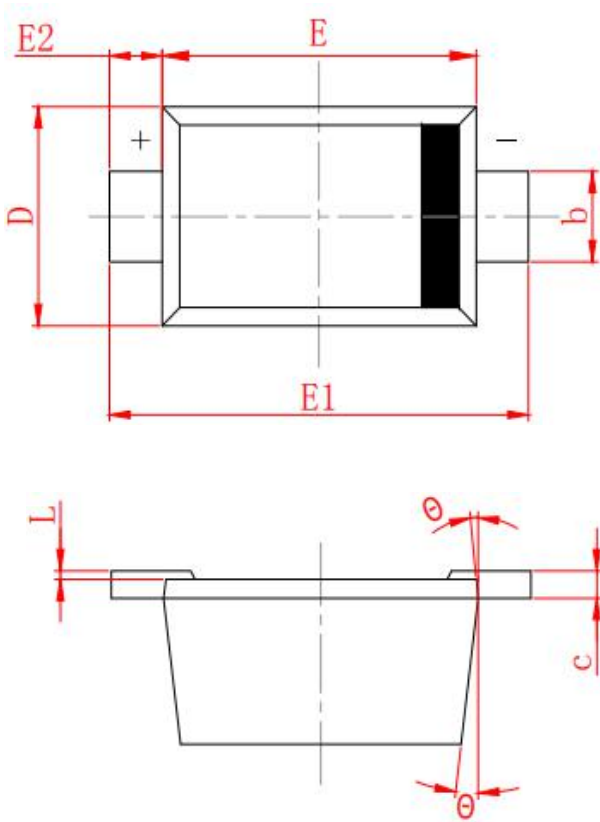
Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

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	75	V
峰值重复反向电压 Peak Repetitive Reverse Voltage	V _{RRM}		
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	150	mA
正向连续电流 Forward Continuous Current	I _{FM}	300	mA
尖峰正向不重复浪涌电流 Non-repetitive Peak Forward Surge Current @t= 8.3ms	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 _{θJA}	833	°C/W

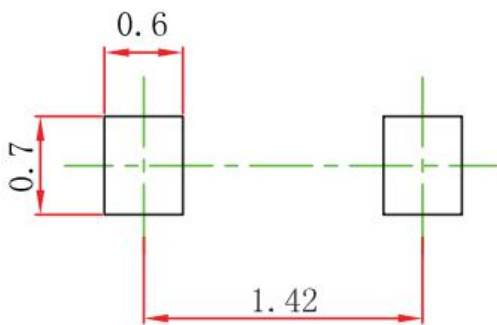
 电特性 **Electrical Characteristics** (Ratings at 25°C ambient temperature unless otherwise specified).

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 =1uA	75		V
I _R	反向漏电流 Reverse Leakage Current	V _R =20V	---	25	nA
		V _R =75	---	1	uA
V _F	正向电压 Forward Voltage	I _F =1mA	---	0.715	V
		I _F =10mA	---	0.855	
		I _F =50mA		1	
		I _F =150mA		1.25	
T _{RR}	反向恢复时间 Reverse Recovery Time	I _F = I _R = 10mA,	---	4	nS
		I _{rr} =0.1*I _R ,			
		R _L =100Ω,			
C	结电容 Capacitance	V _R =0V, f=1MHZ	---	2	pF



SOD-523 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 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.