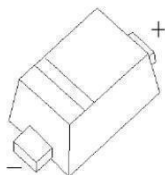


SOD-523



MARKING: $\bar{S}4$



特征 Features

- 低正向电压差 Low Forward Voltage Drop
- 用于瞬态保护的保护环结构 Guard Ring Construction for Transient Protection
- 反向恢复时间低 Low Reverse Recovery Time
- 反向电容低 Low Reverse Capacitance

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

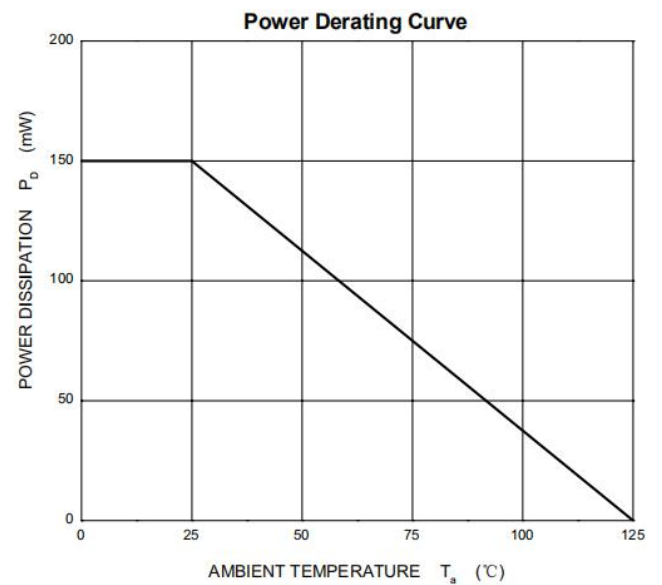
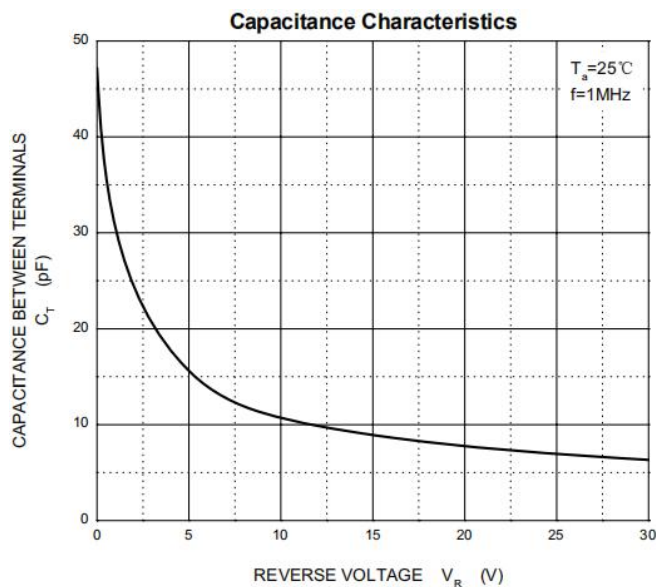
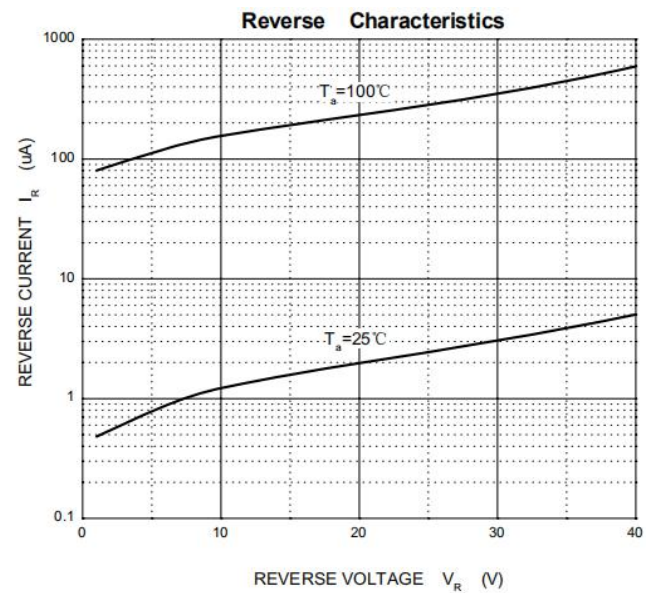
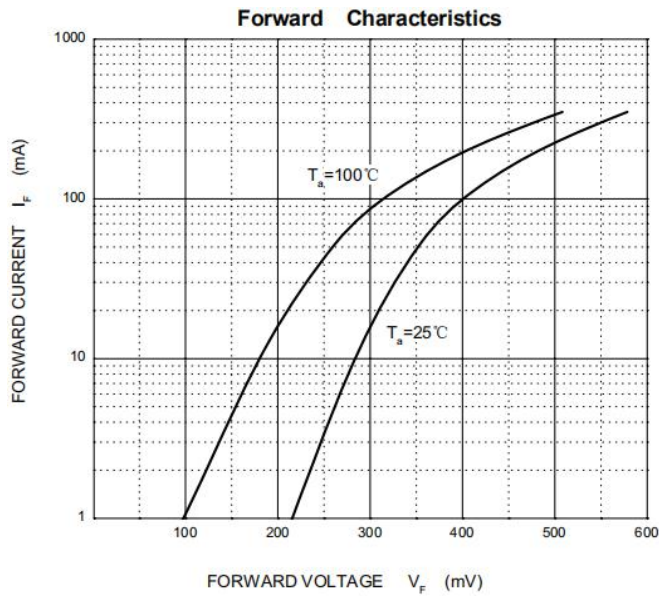
极限值和温度特性 (TA = 25℃ 除非另有规定)

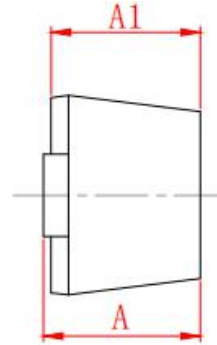
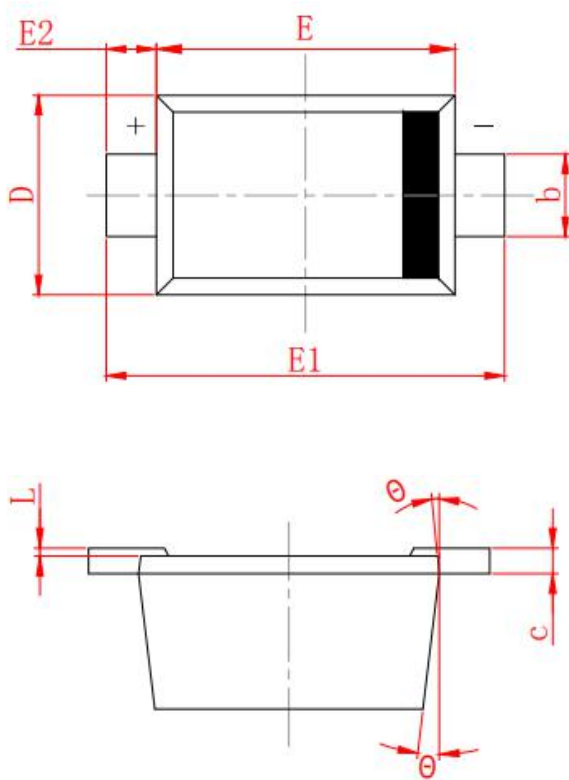
Maximum Ratings & Thermal Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified.)

参数 Parameters	符号 Symbol	数值 Value	单位 Unit
直流阻断电压 DC Blocking Voltage	V _R	40	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)}	28	V
正向连续电流 Forward Continuous Current	I _{FM}	350	mA
尖峰正向不重复浪涌电流 Non-repetitive Peak Forward Surge Current @ t = 8.3ms	I _{FSM}	2	A
功率消耗 Power Dissipation	P _d	150	mW
结温 Junction temperature	T _j	125	℃
存储温度 Storage temperature range	T _{STG}	-55-+150	℃
热阻 Thermal Resistance from Junction to Ambient	R _{θJA}	667	℃/W

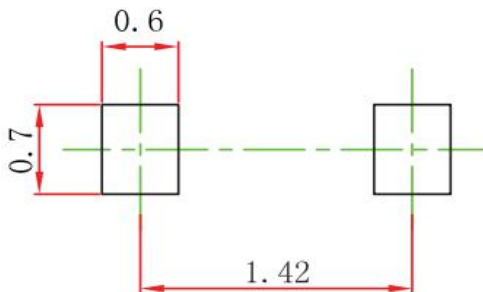
电特性 **Electrical Characteristics** (Ratings at 25℃ ambient temperature unless otherwise specified).

符号 Symbols	参数 Parameter	测试条件 Test Condition	界限 Limits			单位 Unit
			Min	Typ	Max	
V _(BR)	反向击穿电压 Reverse Breakdown Voltage	I _R = 100uA	40			V
I _R	反向漏电流 Reverse Current	V _R = 30V			5	uA
		V _R = 20V			2	
		V _R = 10V			1	
V _F	正向电压 Forward Voltage	I _F = 1mA		0.27		V
		I _F = 5mA		0.32		
		I _F = 20mA			0.37	
		I _F = 200mA			0.6	
T _{rr}	反向恢复时间 Reverse Recovery Time	I _F = I _R = 200mA, I _{rr} = 0.1xI _R , R _L = 100Ω		10		nS
C _{tot}	端子间电容 Total Capacitance	V _R = 0V, f = 1MHz		50		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.

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