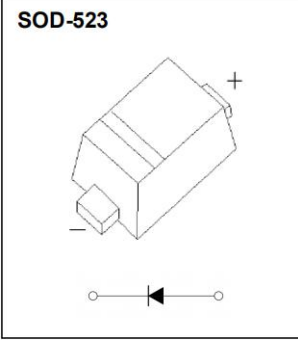


## SOD-523 贴片塑封二极管

## SOD-523 Plastic-Encapsulate Diodes

MARKING:  $\bar{S}4$ 

## 特征 Features

- 低正向电压差 Low Forward Voltage Drop
- 用于瞬态保护的护环结构 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°C 除非另有规定)

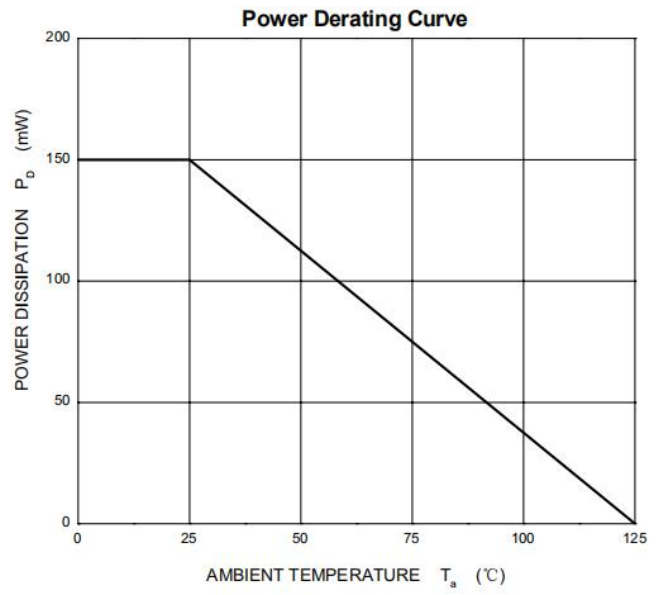
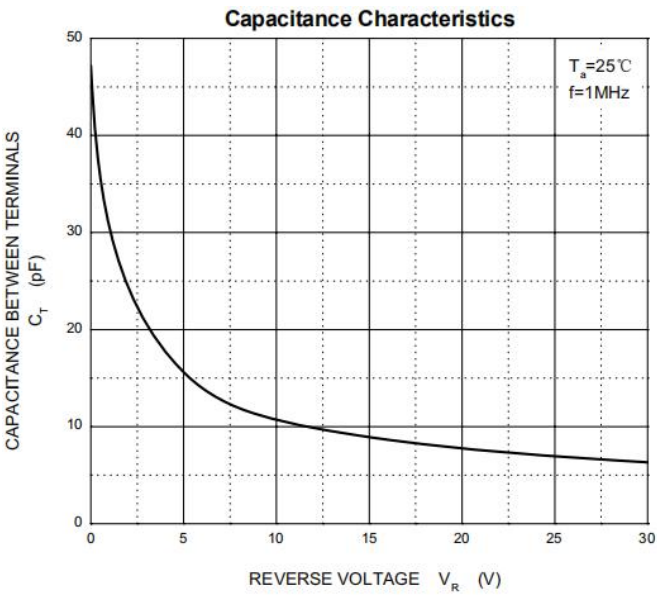
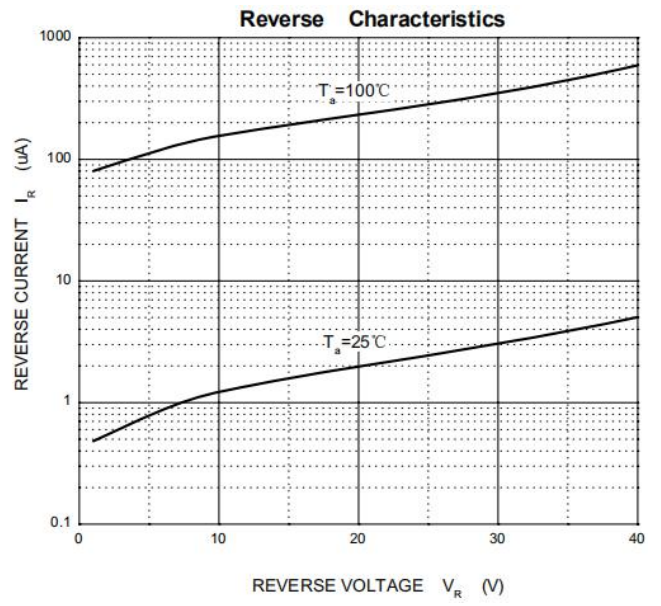
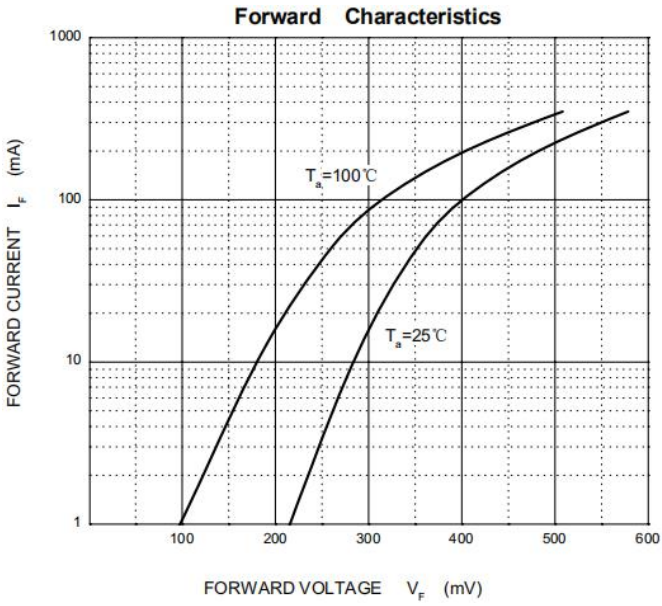
Maximum Ratings &amp; Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

参数 Parameters	符号 Symbol	数值 Value	单位 Unit
直流阻断电压 DC Blocking Voltage	V <sub>R</sub>	40	V
峰值重复反向电压 Peak Repetitive Reverse Voltage	V <sub>RRM</sub>		
反向峰值工作电压 Working Peak Reverse Voltage	V <sub>RWM</sub>		
均方根反向电压 RMS Reverse Voltage	V <sub>R(RMS)</sub>	28	V
正向连续电流 Forward Continuous Current	I <sub>FM</sub>	350	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	A
功率消耗 Power Dissipation	P <sub>d</sub>	150	mW
结温 Junction temperature	T <sub>j</sub>	125	°C
存储温度 Storage temperature range	T <sub>STG</sub>	-55-+150	°C
热阻 Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	667	°C/W

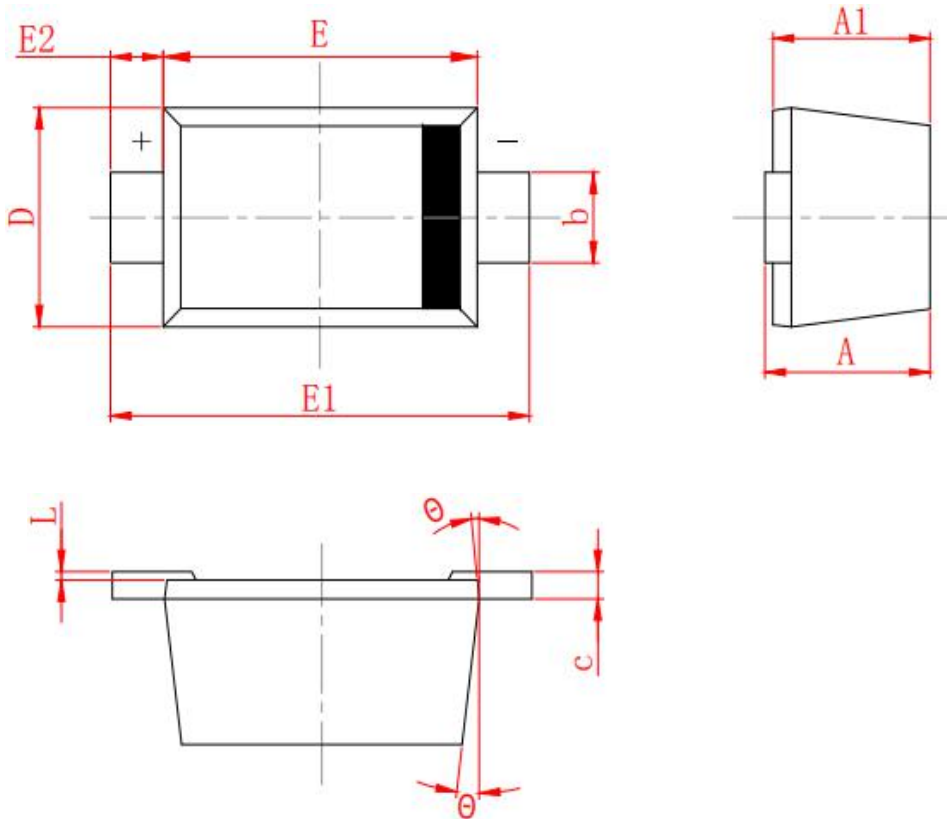
电特性 Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

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

典型特性 Typical Characteristics

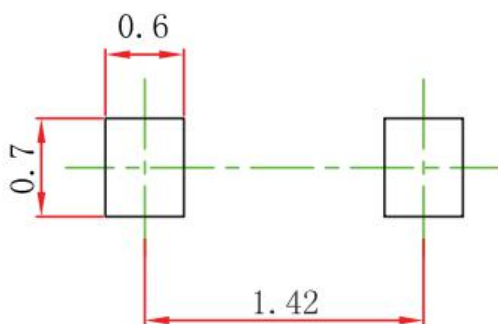


## SOD-523封装外形尺寸图 SOD-523 Package Outline Dimensions



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
$\theta$	7° REF	

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



## Note:

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