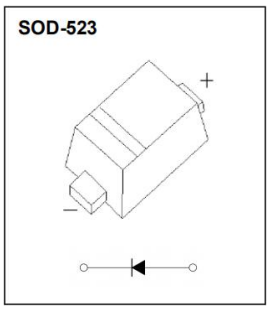


MARKING: 5

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

特征 Features

- 小型表贴封装 Small Surface Mounting Type
- 低反向漏电和正向压降 Low Reverse Current and Low Forward Voltage
- 高可靠性 High Reliability

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)

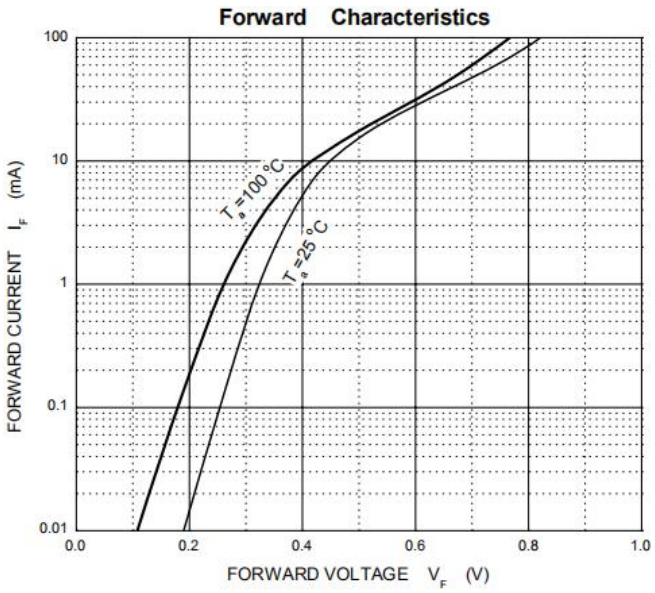
Maximum Ratings & Thermal Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified.)

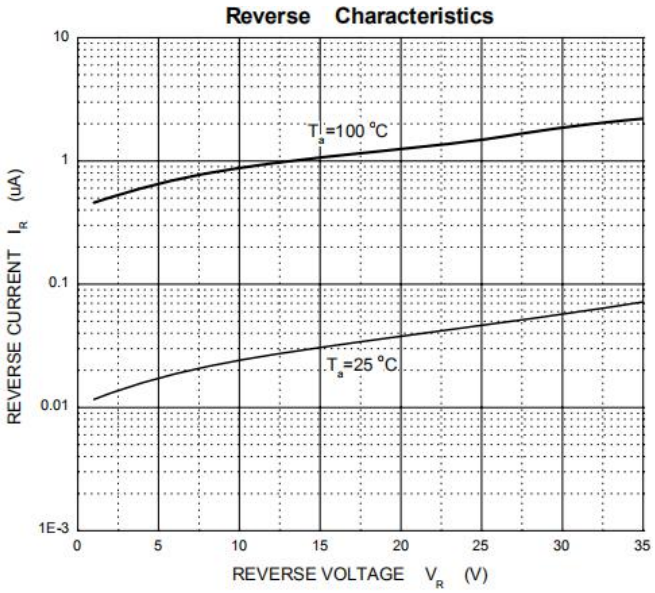
参数 Parameters	符号Symbol	数值 Value	单位Unit
峰值反向电压 Peak Reverse Voltage	V_{RM}	45	V
直流反向电压DC Reverse Voltage	V_R	40	V
平均整流电流Mean Rectifying Current	I_O	30	mA
尖峰正向不重复浪涌电流Non-repetitive Peak Forward Surge Current@t= 8.3ms	I_{FSM}	200	mA
功率消耗Power Dissipation	Pd	150	mW
结温Junction temperature	Tj	125	℃
存储温度Storage temperature range	T_{STG}	-55-+150	℃
热阻Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	667	℃/W

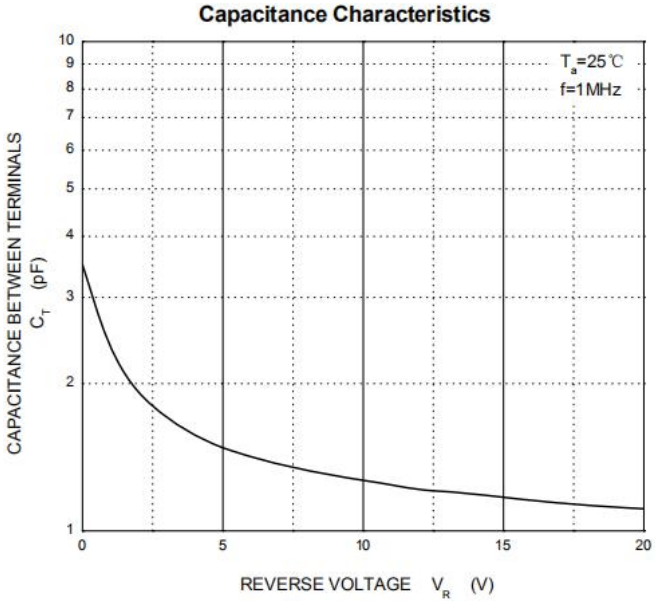
电特性 **Electrical Characteristics** (Ratings at 25℃ ambient temperature unless otherwise specified).

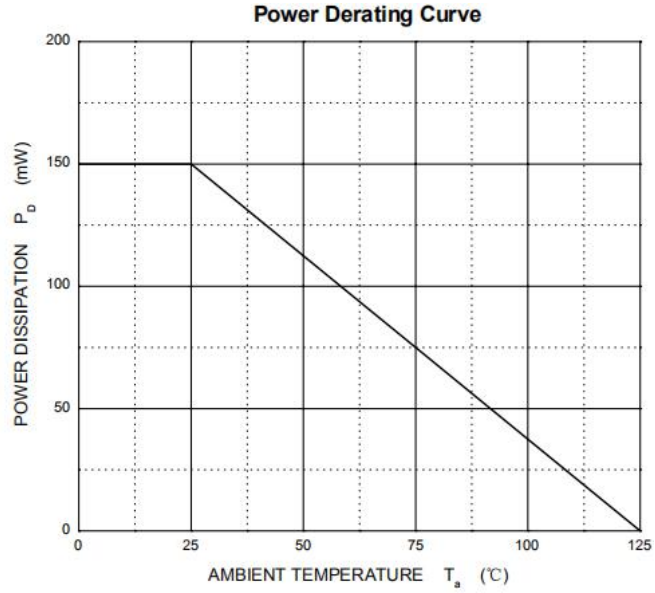
符号	参数	测试条件	界限 Limits		单位
Symbols	**Parameter**	**Test Condition**	**Min**	**Max**	**Unit**
$V_{(BR)}$	反向电压Reverse Voltage	I_R=1mA	40	---	V
V_F	正向电压 Forward Voltage	I_F=1mA	0.2	0.37	V
I_R	反向漏电流 Reverse Current	V_R=30V	0.01	0.5	uA
CT	端子间电容 Capacitance Between Terminals	V_R=1V,f=1MHZ	0.5	10	pF

典型特性Typical Characteristics

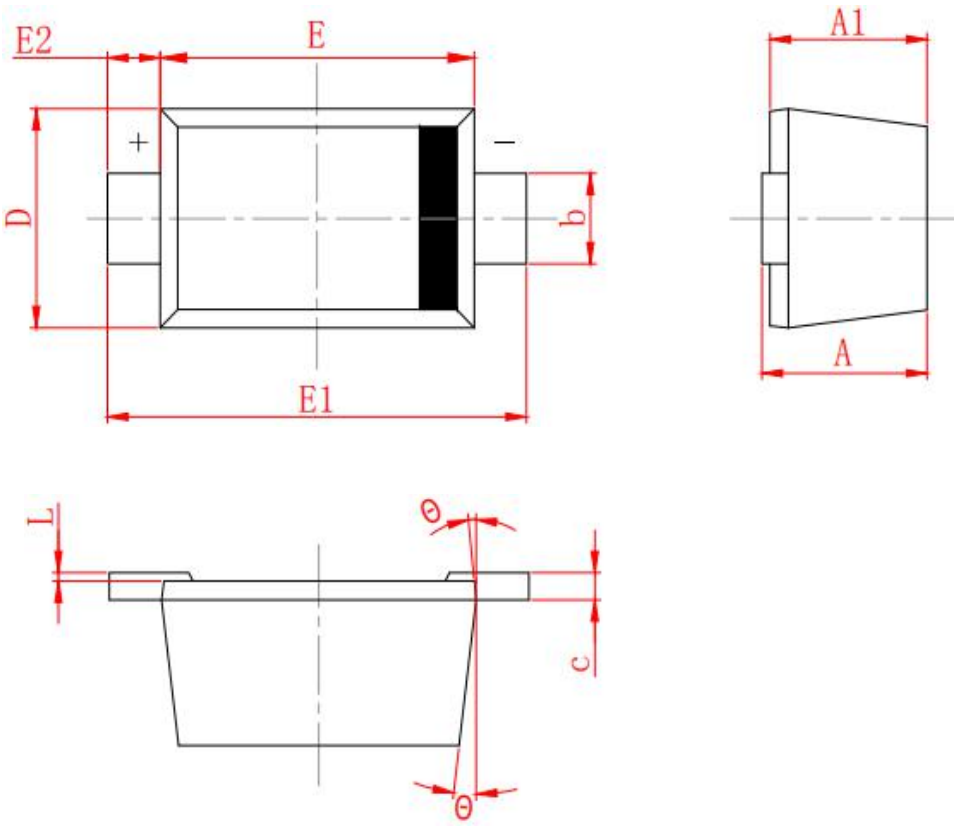






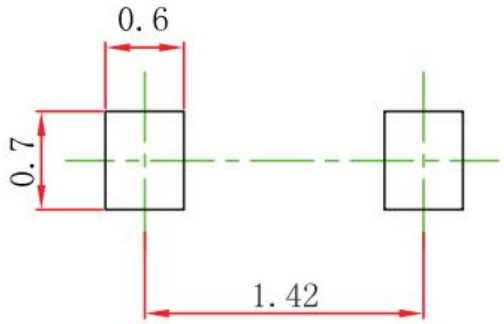


SOD-523封装外形尺寸图 SOD-523 Package Outline Dimensions



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