

SOD-523

SOD-523 贴片塑封二极管

150mW SOD-523 Fast Switching Diode



MARKING: A6



### 特征 Features

- 开关速度小于 6.0nS; Fast Switching Device (TRR <6.0 nS)
- 最大功率耗散 150mW; Power Dissipation of 150mW
- 高稳定性和可靠性。High Stability and High Reliability
- 反向漏电流小。Low reverse leakage

### 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
- 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)

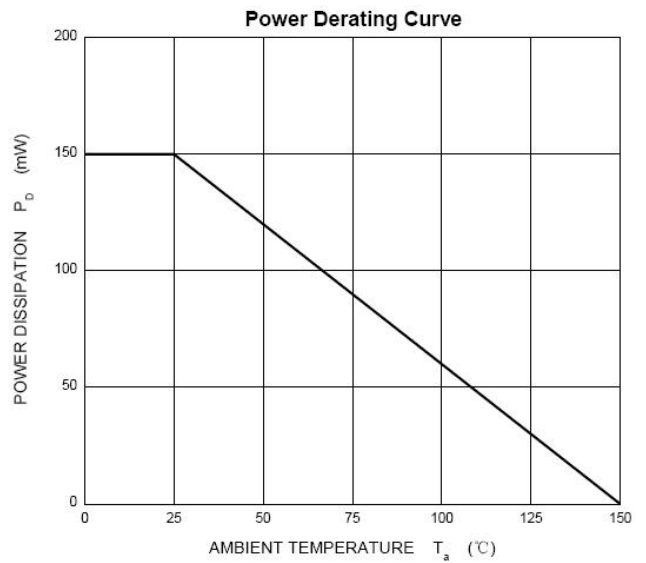
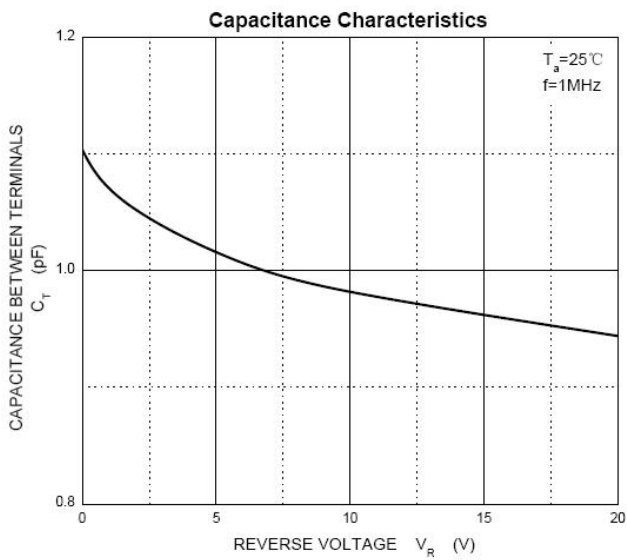
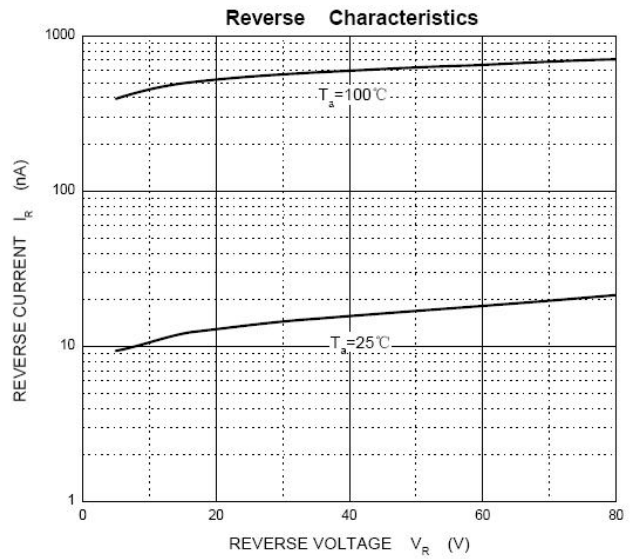
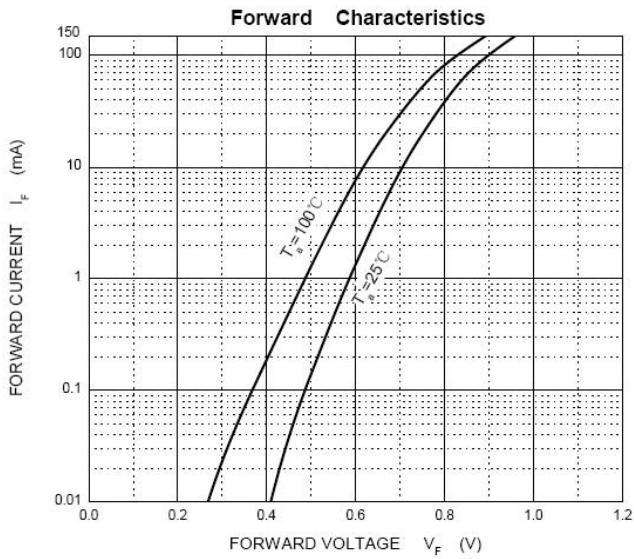
**Maximum Ratings & Thermal Characteristics** (Ratings at 25℃ ambient temperature unless otherwise specified.)

参数 Parameters	符号 Symbol	数值 Value	单位 Unit
反向电压 Reverse Voltage	V <sub>R</sub>	75	V
功率消耗 Power Dissipation	P <sub>d</sub>	150	mW
工作结温 Operating junction temperature	T <sub>j</sub>	150	℃
存储温度 Storage temperature range	T <sub>s</sub>	-55-+150	℃
热阻 Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	833	℃/W
正向电流 Forward Continuous Current	I <sub>F</sub>	200	mA
正向(不重复)浪涌电流 Non-repetitive Peak Forward Surge Current @tp=1us; TA=25℃	I <sub>FSM</sub>	2.0	A

Valid provided that electrodes are kept at ambient temperature.

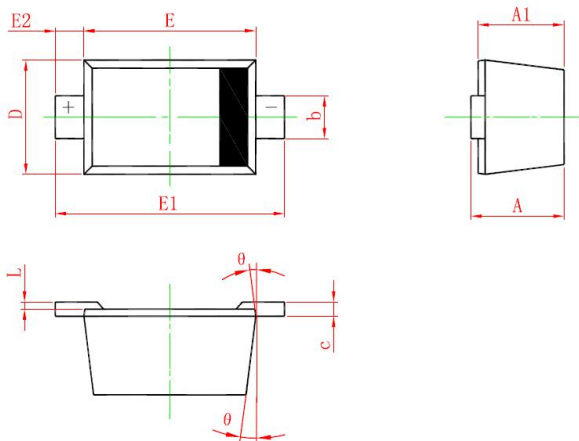
电特性 **Electrical Characteristics** (Ratings at 25℃ ambient temperature unless otherwise specified).

符号 Symbols	参数 Parameter	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
BV	反向击穿电压	IR=100uA	75		V
IR	反向漏电流 Reverse Leakage Current	VR=25V	---	30	nA
		VR=75	---	1	uA
VF	正向电压 Forward Voltage	IF=1.0mA	---	0.715	V
		IF=10mA	---	0.855	
		IF=50mA	---	1.00	
		IF=150mA	---	1.25	
VFR	Forward recovery voltage		---	1.75	V
TRR	反向恢复时间 Reverse Recovery Time	IF= IR=10mA RL=50Ω IRR=0.1 X IR	---	6	nS
Cd	Diode Capacitance	VR=0V, f=1MHZ	---	2	pF
Qs	Stored charge	IF= 10mA VR=5.0V RL=500Ω	---	45	pC



**SOD-523 PACKAGE OUTLINE**

Plastic surface mounted package



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
$\theta$	7° REF		7° REF	