

SOD-523

SOD-523 贴片塑封开关二极管
150mW SOD-523 Fast Switching Diode

特征 Features

- 开关速度小于 50nS; Fast Switching Device (TRR <50nS)
- 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
- 环氧树脂 UL 易燃等级 Epoxy UL: 94V-0
- 安装位置: 任意 Mounting Position: Any

MARKING: T3

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.)

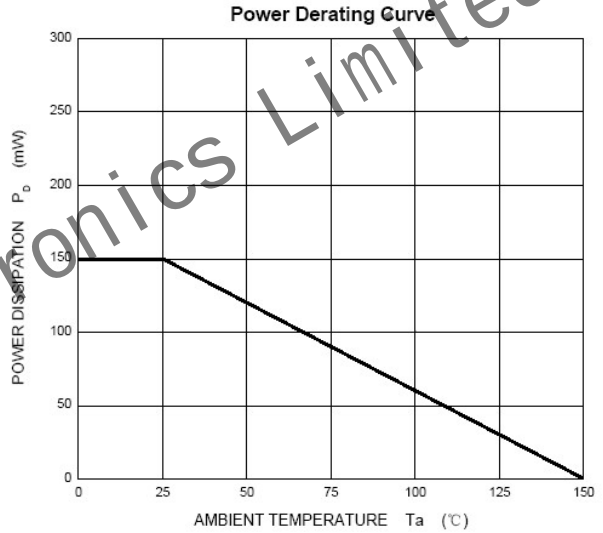
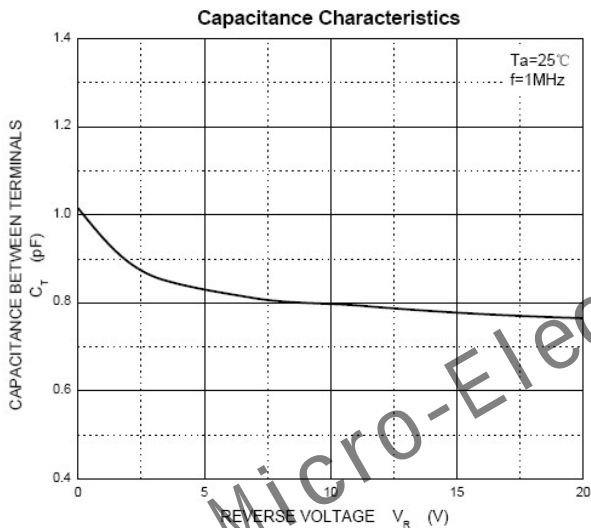
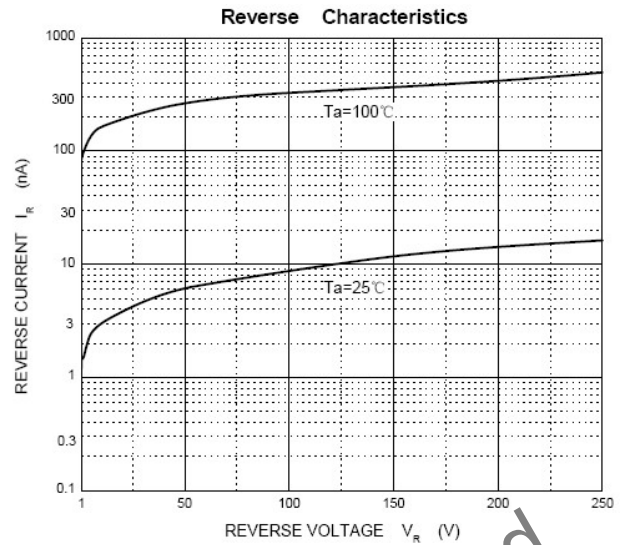
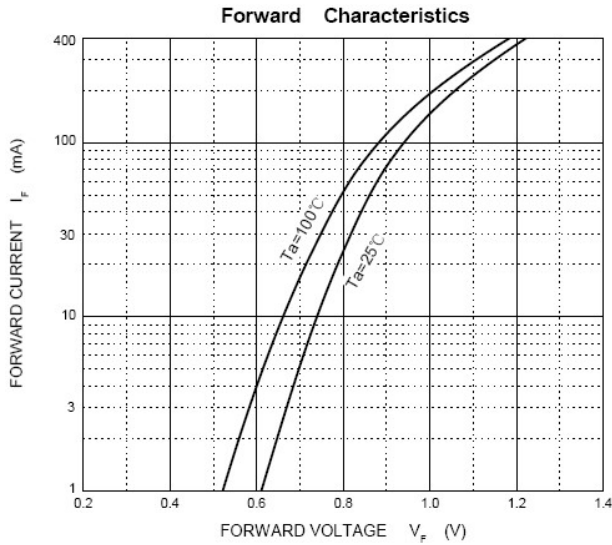
参数 Parameters	符号 Symbol	数值 Value	单位 Unit
反向电压 Reverse Voltage	VR	250	V
反向峰值电压 Peak Reverse Voltage	VRM	250	V
功率消耗 Power Dissipation	Pd	150	mW
工作结温 Operating junction temperature	Tj	150	℃
存储温度 Storage temperature range	Ts	-65-+150	℃
热阻 Thermal Resistance Junction to Ambient Air	RθJA	833	℃/W
平均整流电流 Average Rectified Current	IO	200	mA
正向(不重复)电流 Non-repetitive Peak Forward Current	IFM	400	mA
正向(不重复)浪涌电流 Peak Forward Surge Current @tp=1ms; TA=25℃	IFSM	1.7	A

Valid provided that electrodes are kept at ambient temperature.

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

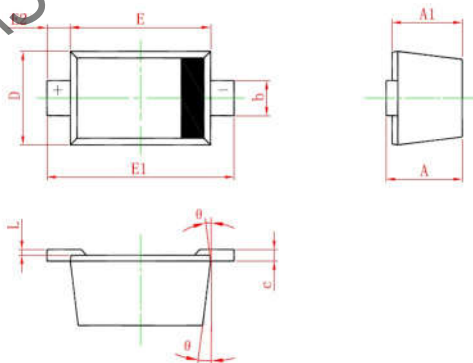
符号 Symbols	参数 Parameter	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
VRB	反向击穿电压 Reverse Voltage	IB=100uA	250	---	V
IR	反向漏电流	VR=200V	---	0.1	uA
	Reverse Leakage Current				
VF	正向电压	IF=100mA	---	1.00	V
	Forward Voltage	IF=200mA	---	1.25	
TRR	反向恢复时间	IF= 30mA, IR=30mA	---	50	nS
	Reverse Recovery Time	RL=100Ω			
		IRR=3mA			
C	结电容	VR=0V, f=1MHZ	---	5	pF
	Capacitance				

Typical Characteristics



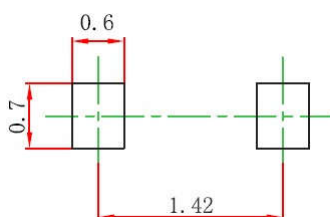
SOD-523 PACKAGE OUTLINE

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
θ	7° REF		7° REF	

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.