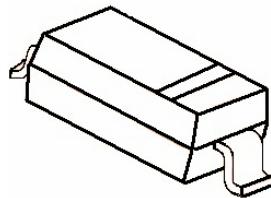


SOD-123

500mW SOD-123 Fast Switching Diode

特征 Features

- 开关速度小于 4.0nS; Fast Switching Device (TRR <4.0 nS)
- 最大功率耗散 500mW; Power Dissipation of 500mW
- 高稳定性和可靠性。High Stability and High Reliability
- 反向漏电流小。Low reverse leakage



MARKING: T5

机械数据 Mechanical Data

- 封装: SOD-123 封装 SOD-123 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($T_A = 25^\circ\text{C}$ 除非另有规定)Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

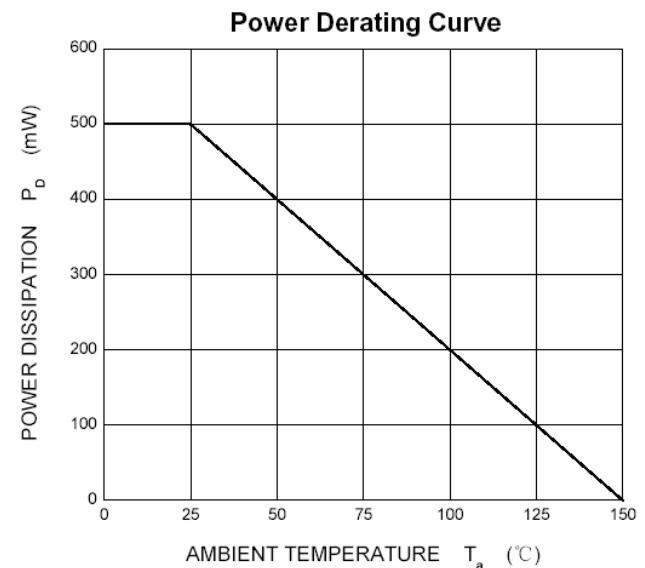
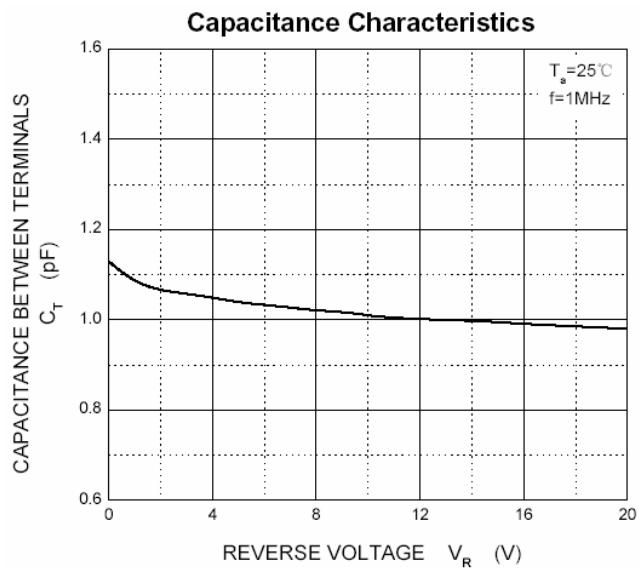
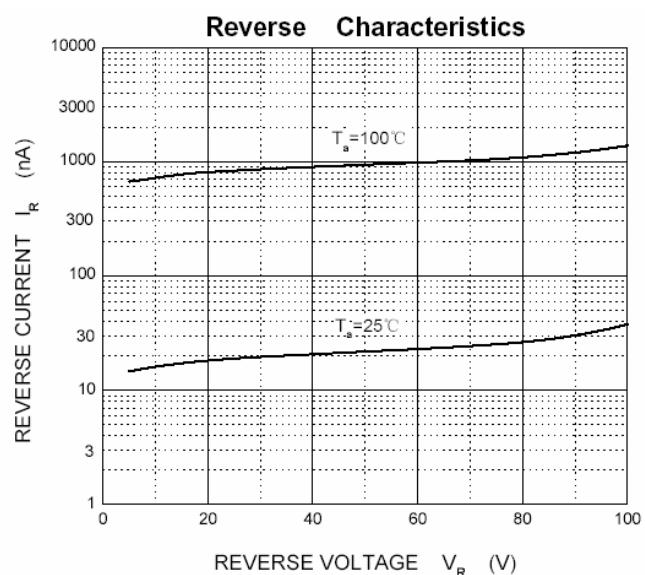
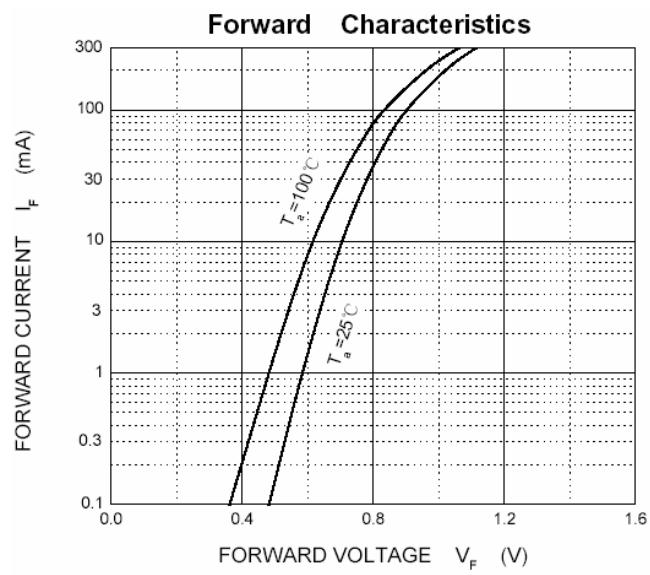
参数 Parameters	符号 Symbol	数值 Value	单位 Unit
反向电压 Reverse Voltage	V_R	75	V
反向峰值电压 Peak Reverse Voltage	V_{RM}	100	V
功率消耗 Power Dissipation	P_d	500	mW
工作结温 Operating junction temperature	T_j	150	$^\circ\text{C}$
存储温度 Storage temperature range	T_s	-55~+150	$^\circ\text{C}$
反向工作电压 Working Inverse Voltage	V_{IV}	75	V
平均整流电流 Average Rectified Current	I_o	200	mA
正向(不重复)电流 Non-repetitive Peak Forward Current	I_{FM}	500	mA
正向(不重复)浪涌电流 Peak Forward Surge Current @ $t_p=1\mu\text{s}; TA=25^\circ\text{C}$	I_{FSM}	2.0	A

Valid provided that electrodes are kept at ambient temperature.

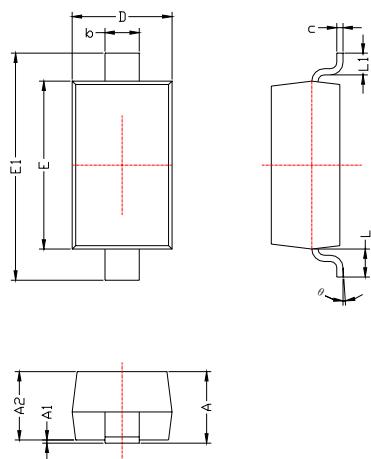
电特性 Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified).

符号 Symbols	参数 Parameter	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
B_v	反向击穿电压	$IR=100\mu\text{A}$	100	---	V
	Breakdown Voltage	$IR=5\mu\text{A}$	75		
I_R	反向漏电电流	$VR=20\text{V}$	---	25	nA
	Reverse Leakage Current	$VR=75$	---	2.5	uA
V_F	正向电压 Forward Voltage	$IF=5\text{mA}$	0.62	0.72	V
		$IF=10\text{mA}$	---	0.855	
		$IF=100\text{mA}$	---	1.0	
		$IF=150\text{mA}$	---	1.25	
TRR	反向恢复时间	$IF= 10\text{mA}, IR=10\text{mA}$	---	4	nS
	Reverse Recovery Time	$RL=100\Omega$			
		$IRR=0.1\text{mA}$			
C	结电容	$VR=0\text{V}, f=1\text{MHz}$	---	4	pF
	Capacitance				





SOD-123 PACKAGE OUTLINE Plastic surface mounted package



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500REF	
L1	0.250	0.450
θ	0°	8°

