

SOD-123 Switching Diode 开关二极管

■Features 特点

Fast Switching Speed 快的开关速度

Surface mount device 表面贴装器件

High Conductance 高电导率

Case 封装:SOD-123

Marking 印字: T4



■Maximum Rating 最大额定值

($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

Characteristic 特性参数	Symbol 符号	Rating 额定值	Unit 单位
Non-Repetitive Peak Reverse Voltage 不重复反向峰值电压	V_{RM}	100	V
DC Reverse Voltage 直流反向电压	V_R	100	V
Peak Repetitive Reverse Voltage 峰值重复反向电压	V_{RRM}	100	V
Woke Peak Reverse Voltage 峰值反向工作电压	V_{RWM}	100	V
RMS Reverse Voltage 反向电压均方根值	$V_{R(RMS)}$	71	V
Forward Rectified Output Current 正向工作电流	I_O	150	mA
Forward Continuous Current 正向连续电流	I_{FM}	300	mA
Non-Repetitive Peak Surge Current@ $t=1\mu\text{S}$ 不重复峰值浪涌电流@ $t=1\text{S}$	I_{FSM}	2 1	A
Power Dissipation 耗散功率	P_D	400	mW
Thermal Resistance Junction-Ambient 结到环境热阻	$R_{\theta JA}$	357	$^{\circ}\text{C}/\text{W}$
Junction/Storage Temperature 结温/储藏温度	T_J, T_{stg}	$-65\text{to}+150^{\circ}\text{C}$	$^{\circ}\text{C}$

■Electrical Characteristics 电特性

($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

Characteristic 特性参数	Symbol 符号	Min 最小值	Max 最大值	Unit 单位	Condition 条件
Reverse Voltage 反向电压	V_R	100		V	$I_R=1\mu\text{A}$
Forward Voltage 正向电压	V_F		0.715 0.855 1.0 1.25	V	$I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=150\text{mA}$
Reverse Current 反向电流	I_R		1 25	μA nA	$V_R=100\text{V}$ $V_R=20\text{V}$
Revers Recovery Time 反向恢复时间	T_{rr}		4	nS	$I_{rr} = 0.1 \cdot I_R$, $R_L = 100\Omega$, $I_F = I_R = 10\text{mA}$
Junction Capacitance 结电容	C_J		2	pF	$V_R=0\text{V}$, $f=1\text{MHz}$

■ Typical Characteristic Curve 典型特性曲线

Fig.1 Power Derating Curve

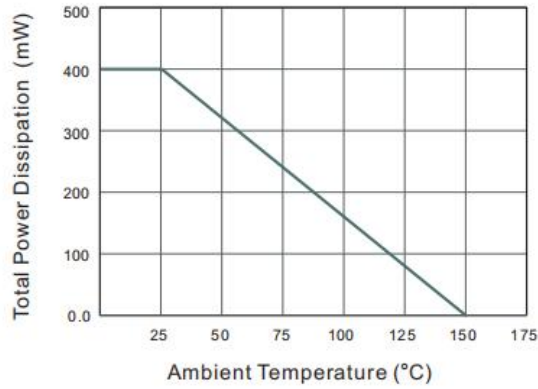


Fig.2 Typical Reverse Characteristics

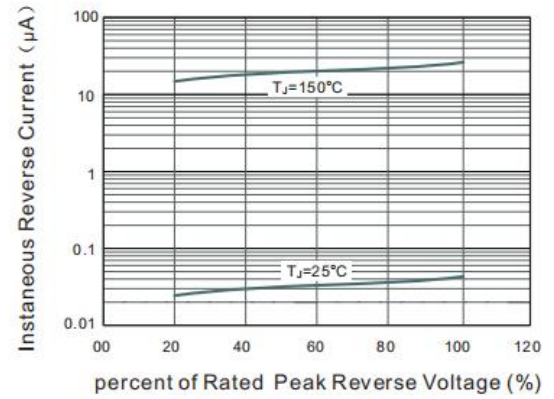


Fig.3 Typical Instaneous Forward Characteristics

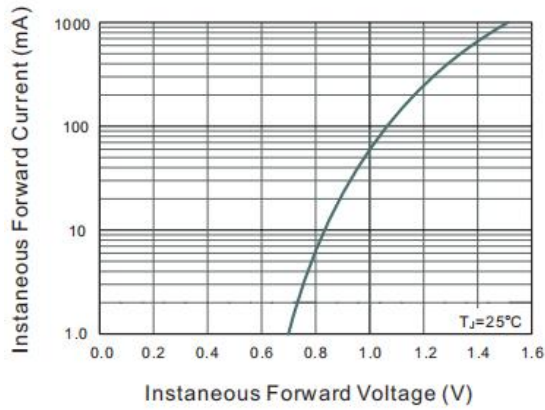
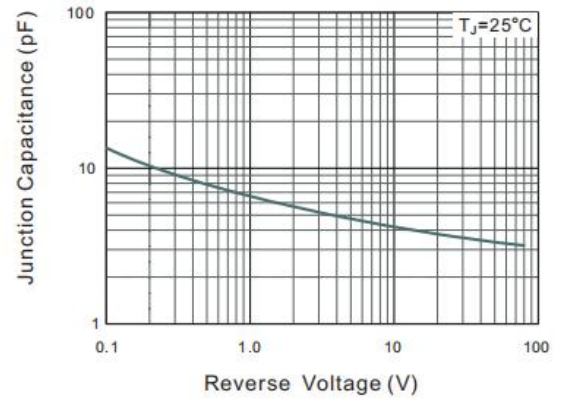
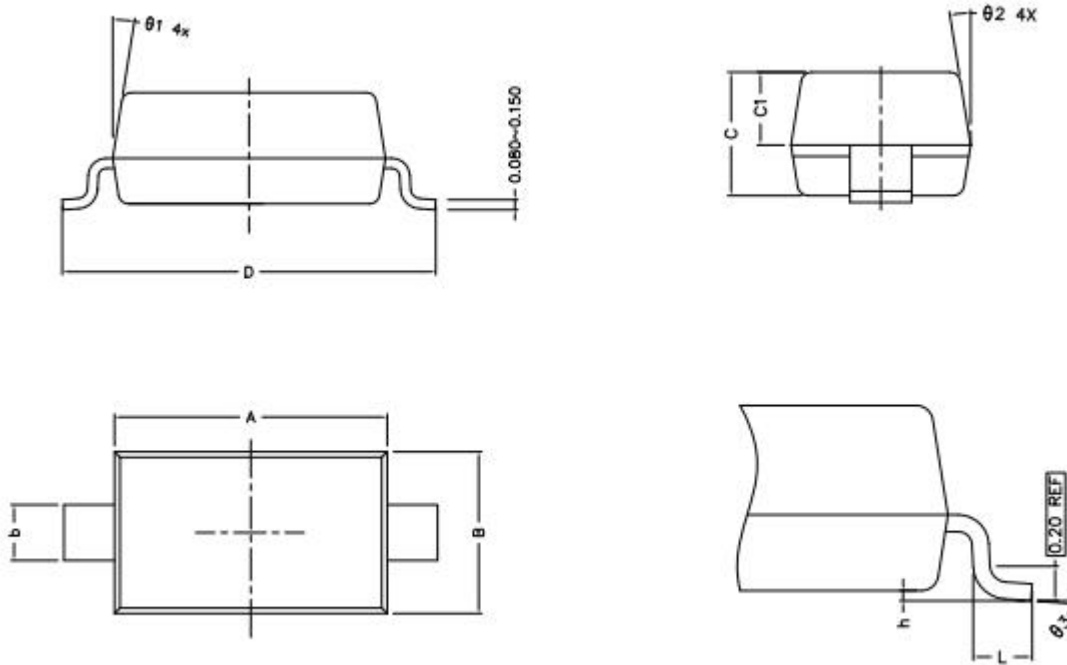


Fig.4 Typical Junction Capacitance



■ **Dimension** 外形封装尺寸



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	2.600	2.800	0.102	0.110
B	1.500	1.700	0.059	0.067
C	1.050	1.150	0.041	0.045
C1	0.600	0.700	0.024	0.028
D	3.550	3.850	0.140	0.152
L	0.250	0.450	0.010	0.018
b	0.450	0.650	0.018	0.026
h	0.020	0.120	0.001	0.005
θ 3	0°	7°	0°	7°