1N4148W

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℃ unless otherwise noted 如无特殊说明，温度为 25℃**)**

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=1μS 不重复峰值浪涌电流@t=1S	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	℃/W
Junction/Storage Temperature 结温/储藏温度	T_J,T_{stg}	-65to+150℃	℃

■Electrical Characteristics 电特性

(T_A=25℃ unless otherwise noted 如无特殊说明，温度为 25℃**)**

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=1μA
Forward Voltage 正向电压	V_F		0.715 0.855 1.0 1.25	V	I_F=1mA I_F=10mA I_F=50mA I_F=150mA
Reverse Current 反向电流	I_R		1 25	μA nA	V_R=75V V_R=20V
Revers Recovery Time 反向恢复时间	Trr		4	nS	I_{rr}= 0.1*I_R, R_L= 100Ω, I_F = I_R = 10 mA
Junction Capacitance 结电容	C_J		2	pF	V_R=0V,f=1MHz

■Typical Characteristic Curve 典型特性曲线

Fig.1 Power Derating Curve

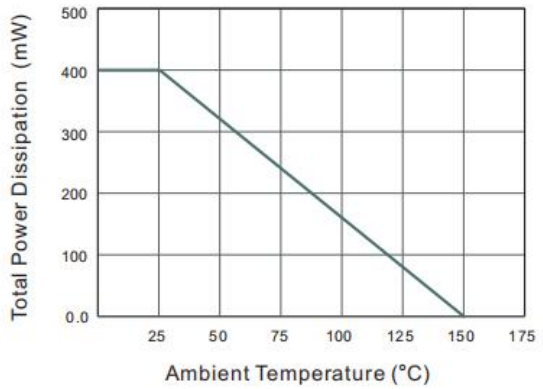


Fig.2 Typical Reverse Characteristics

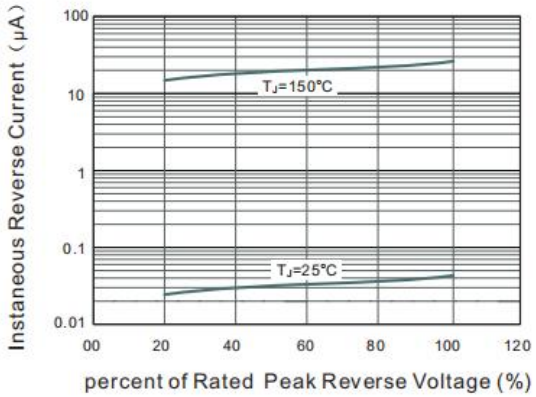


Fig.3 Typical Instaneous Forward Characteristics

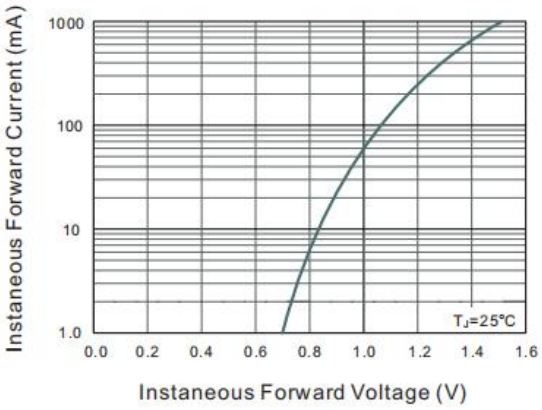
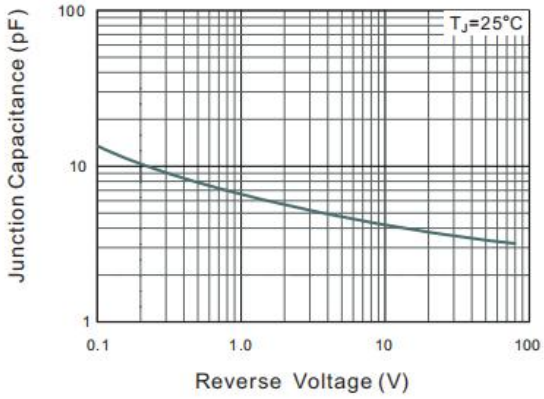
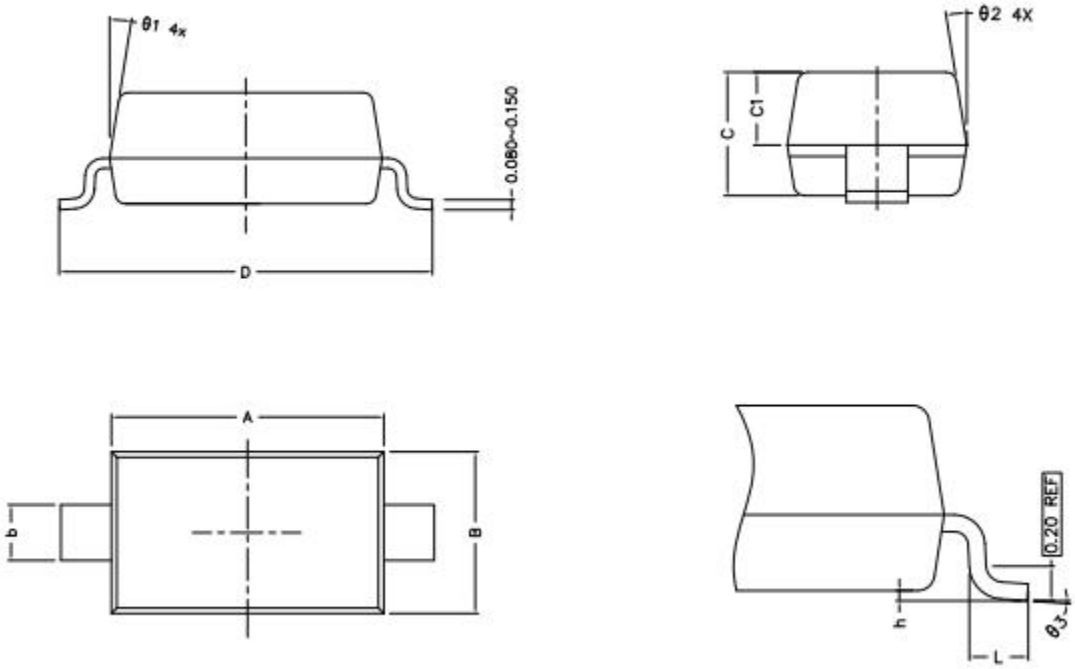


Fig.4 Typical Junction Capacitance



■ 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
Θ3	0°	7°	0°	7°