

SOD-523 Switching Diode 开关二极管

■Features 特点

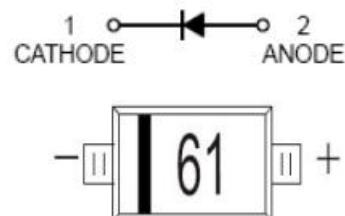
Fast Switching Speed 快的开关速度

Surface mount device 表面贴装器件

High Conductance 高电导率

Case 封装:SOD-523

Marking 印字: 61



■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)

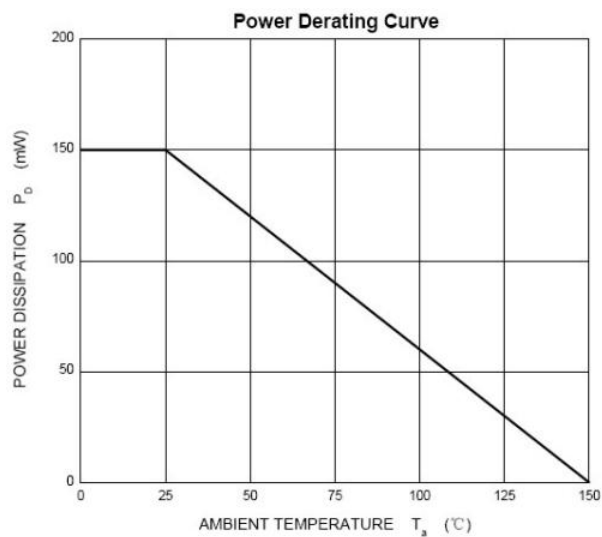
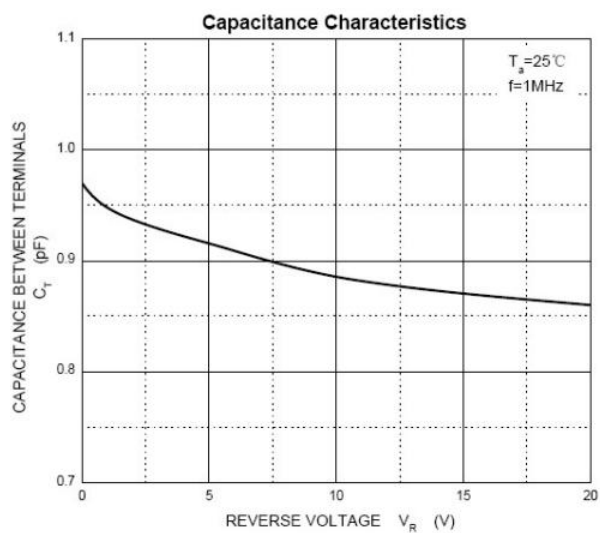
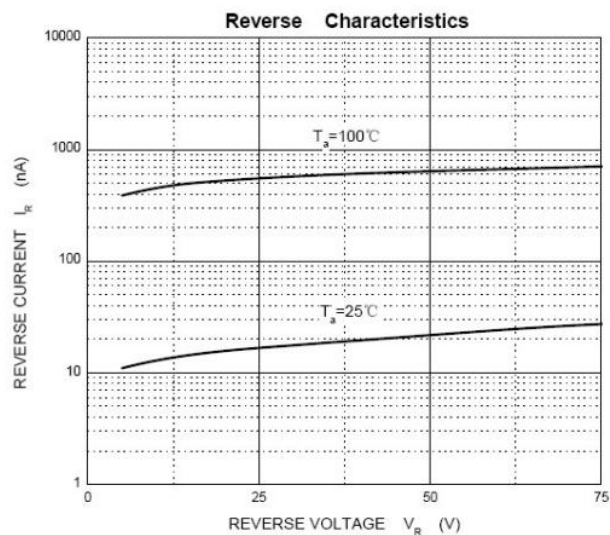
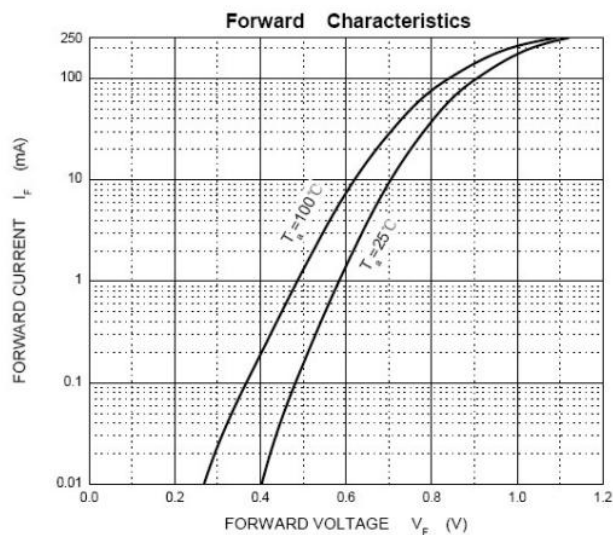
Characteristic 特性参数	Symbol 符号	Rating 额定值	Unit 单位
Non-Repetitive Peak Reverse Voltage 不重复反向峰值电压	V_{RM}	100	V
DC Reverse Voltage 直流反向电压	V_R	75	V
Forward Rectified Output Current 正向工作电流	I_O	250	mA
Non-Repetitive Peak Surge Current@ $t=1\mu\text{s}$ 不重复峰值浪涌电流	I_{FSM}	2	A
Power Dissipation 耗散功率	P_D	150	mW
Thermal Resistance Junction-Ambient 结到环境热阻	$R_{\theta JA}$	833	$^{\circ}\text{C}/\text{W}$
Junction/Storage Temperature 结温/储藏温度	T_J, T_{stg}	$-50\text{to}+150^{\circ}\text{C}$	$^{\circ}\text{C}$

■Electrical Characteristics 电特性

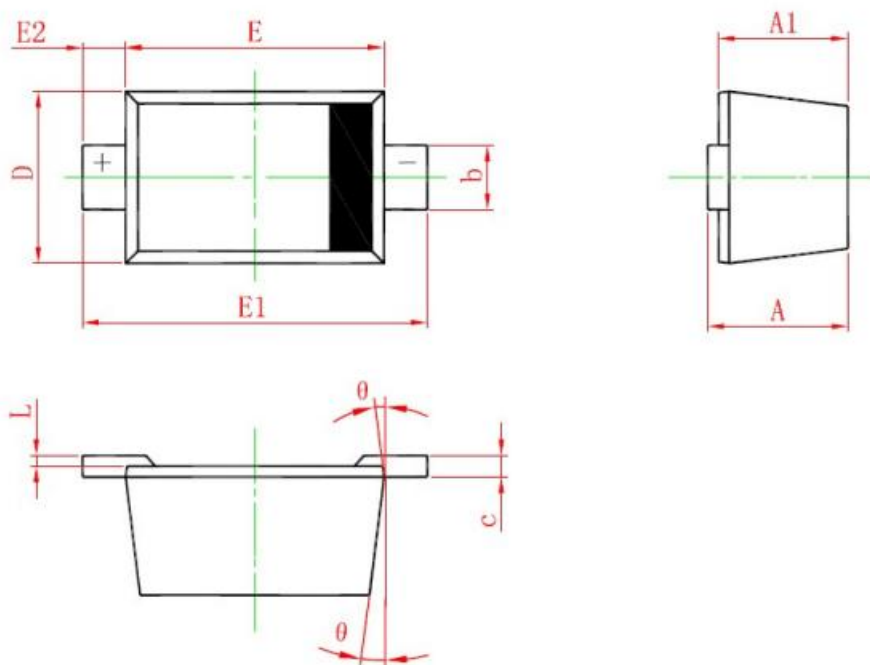
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

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	75		V	$I_R=100\mu\text{A}$
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 30	μA nA	$V_R=75\text{V}$ $V_R=25\text{V}$
Junction Capacitance 结电容	C_J		1	pF	$V_R=0\text{V}, f=1\text{MHz}$
Revers Recovery Time 反向恢复时间	T_{rr}		4	nS	$I_{rr}=0.1*I_R, I_F=I_R=10\text{mA}, R_L=100\Omega$

■ Typical Characteristic Curve 典型特性曲线



■ Dimension 外形封装尺寸



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	