



## SOT-23-6L ESD 静电保护二极管

### ■ Features 特点

Un-directional ESD Protection 单向静电保护

Ultra-low capacitance 极低电容

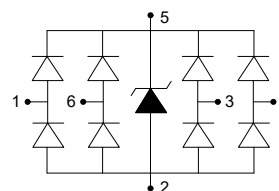
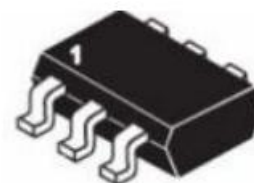
### ■ Applications 应用

Notebooks Computer 笔记本电脑

SIM Ports and Ethernet 用户识别和以太网

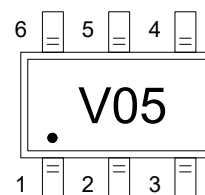
USB&ATM Interface 移动 U 盘及自动柜员机接口

Monitors and flat panel display 监视器和平板显示器



### ■ Internal Schematic Diagram 内部结构

### ■ Device Marking 产品打标



### ■ Absolute Maximum Ratings 最大额定值

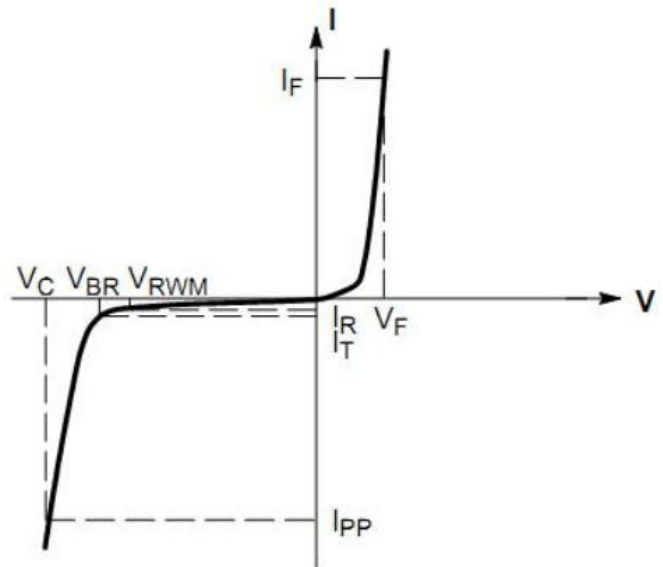
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25°C接触放电	$V_{ESD}$	$\pm 12$	KV
ESD (IEC61000-4-2 air discharge) @25°C空气放电	$V_{ESD}$	$\pm 17$	KV
Peak Pulse Power @25°C峰值脉冲功率	$P_{PK}$	60	W
Peak Pulse Current @25°C峰值脉冲电流	$I_{PP}$	4.5	A
Lead Temperature 管脚温度	$T_L$	260	°C
Lead Solder Time 管脚焊接时间	$T_L$	10	S
Operating Temperature 工作温度	$T_{op}$	-40~85	°C
Junction Temperature 结温	$T_J$	-55~125	°C
Storage Temperature 储存温度	$T_{stg}$	-55~150	°C

## ■ Electrical Characteristics 电特性

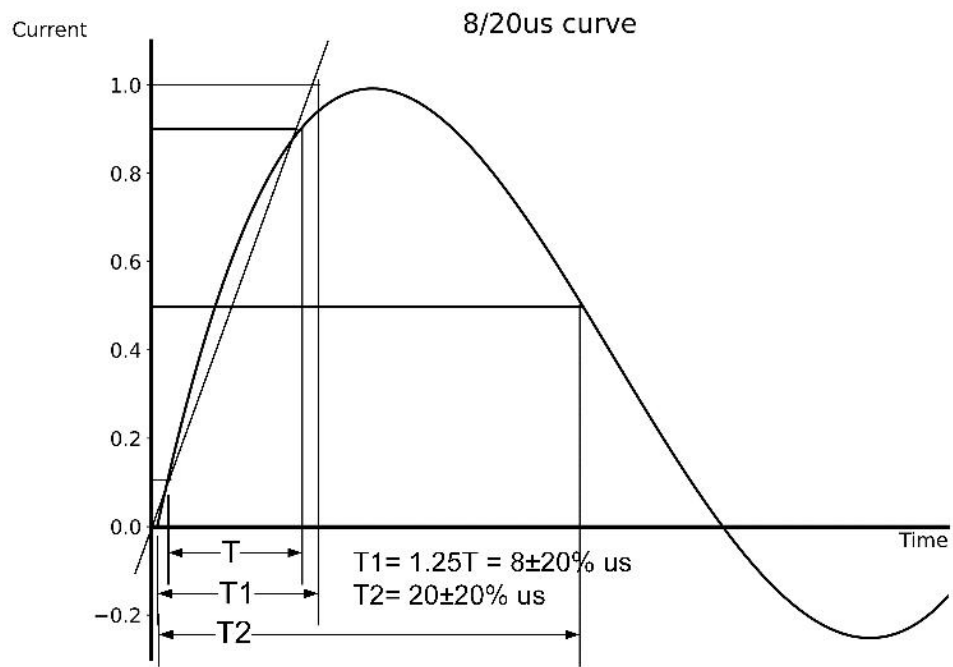
( $T_A=25^{\circ}\text{C}$  unless otherwise noted 如无特殊说明, 温度为  $25^{\circ}\text{C}$ )

Characteristic Parameters 特性参数	Symbol 符号	Min 最小值	Typ 典型值	Max 最大值	Unit 单位	Condition 条件
Reverse Stand-off Voltage 反向工作电压	$V_{RWM}$			5	V	
Reverse Breakdown Voltage 反向击穿电压	$V_{BR}$	6			V	$I_T=1\text{mA}$
Reverse Leakage Current 反向漏电流	$I_R$			1	$\mu\text{A}$	$V_{RWM}=5\text{V}$
Clamping Voltage 钳位电压	$V_C$		9		V	$I_{PP}=1\text{A}$ , $t_p=8/20\mu\text{s}$
Clamping Voltage 钳位电压	$V_C$		12		V	$I_{PP}=4.5\text{A}$ , $t_p=8/20\mu\text{s}$
Diode Capacitance 二极管电容	$C_D$	I/O to GND Between I/O	0.6 0.3	0.8 0.4	pF	$V_R=0\text{V}$ , $f=1\text{MHz}$

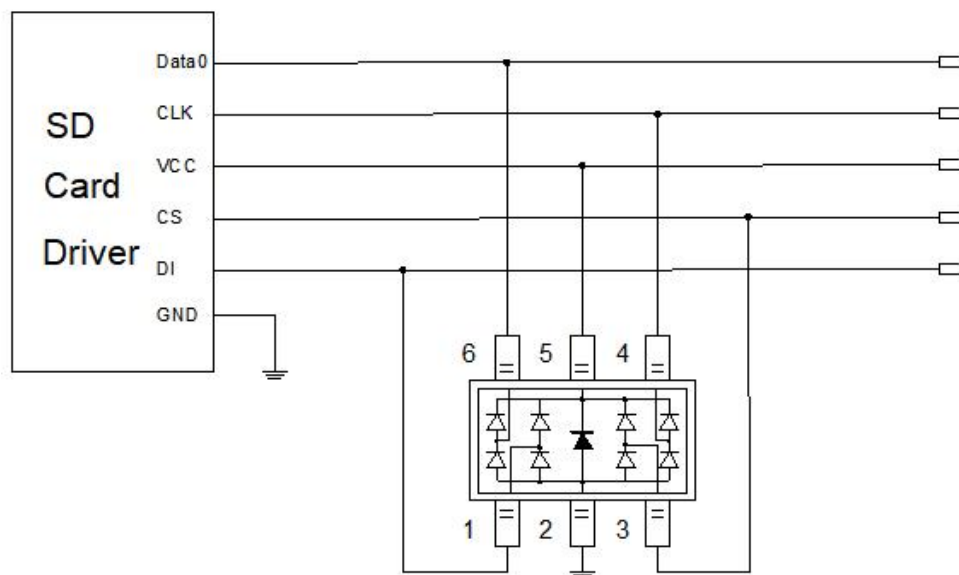
$V_{RWM}$	Reverse Working Voltage 反向工作电压
$V_{R(BR)}$	Reverse Breakdown Voltage 反向击穿电压@ $I_T=1\text{mA}$
$I_T$	Test Current 测试电流
$I_R$	Reverse Leakage Current 反向漏电流@ $V_{RWM}$
$V_C$	Clamping Voltage 钳位电压
$I_{PP}$	Reverse Peak Pulse Current 浪涌电流
$C_D$	Diode Capacitance 电容 $V_{I0}=0\text{V}$ , $f = 1\text{MHz}$



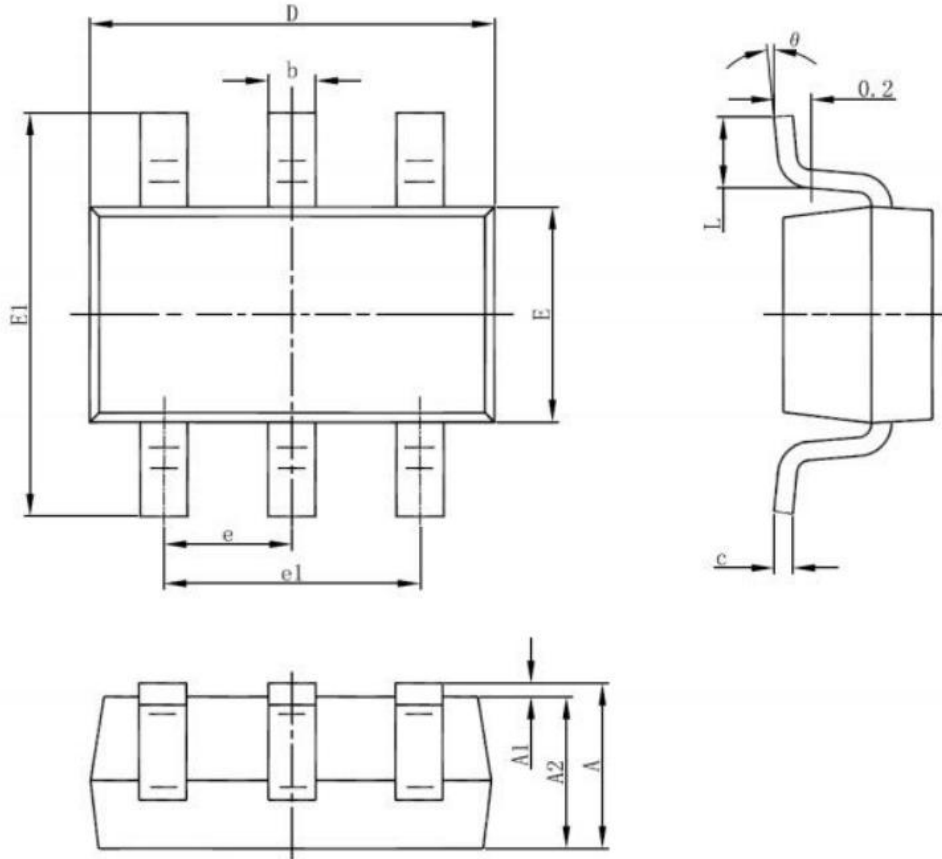
## ■ Typical Characteristic Curve 典型特性曲线



## ■ Typical Application 典型应用



## Dimension 外形封装尺寸



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.820	3.020	0.111	0.119
E	1.500	1.700	0.059	0.067
E1	2.650	2.950	0.104	0.116
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.600REF		0.024REF	
θ	0°	8°	0°	8°