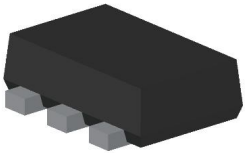
SOT-563 ESD 静电保护二极管

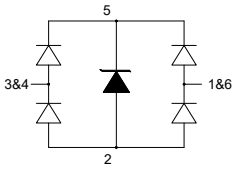


■Features 特点

Un-directional ESD Protection 单向静电保护
Low capacitance 低电容

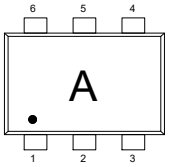
■Applications 应用

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

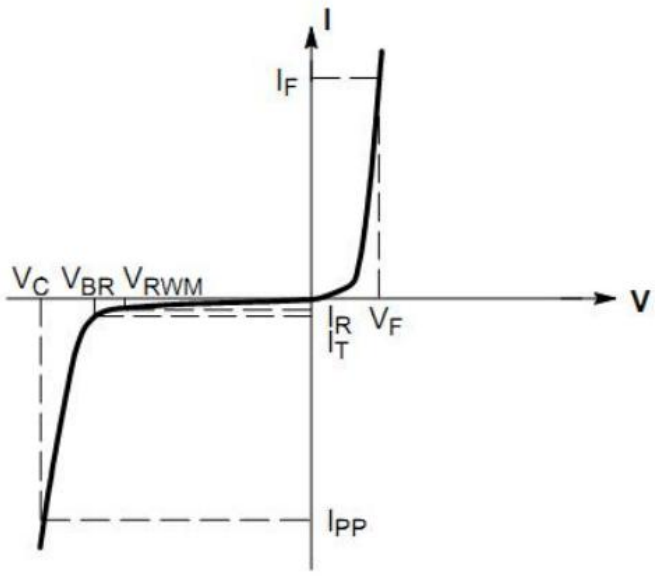
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25℃接触放电	V_{ESD}	±12	KV
ESD (IEC61000-4-2 air discharge) @25℃空气放电	V_{ESD}	±17	KV
Peak Pulse Power @25℃峰值脉冲功率	P_{PK}	60	W
Peak Pulse Current @25℃峰值脉冲电流	I_{PP}	4.5	A
Lead Temperature 管脚温度	T_L	260	℃
Lead Solder Time 管脚焊接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

■Electrical Characteristics 电特性

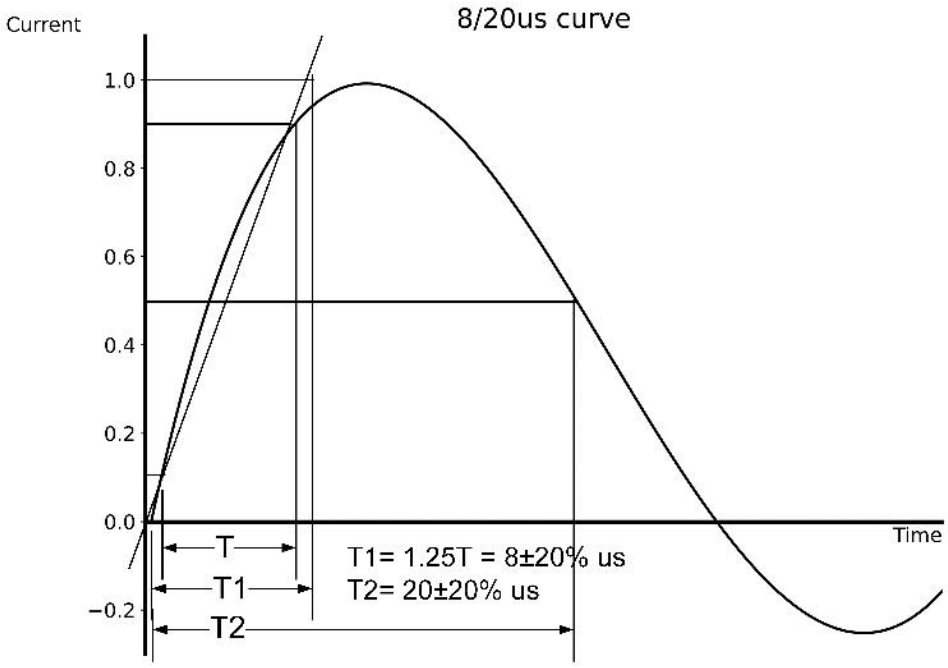
(T_A=25℃ unless otherwise noted 如无特殊说明，温度为 25℃)

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=1mA
Reverse Leakage Current 反向漏电流	I_R			1	μA	V_{RWM}=5V
Clamping Voltage 钳位电压	V_C		8.5		V	I_{PP}=1A, tp=8/20μs
Clamping Voltage 钳位电压	V_C		12		V	I_{PP}=4.5A, tp=8/20μs
Diode Capacitance 二极管电容	C_D	I/O to GND Between I/O	0.6 0.3		pF	V_R=0V, f=1MHz

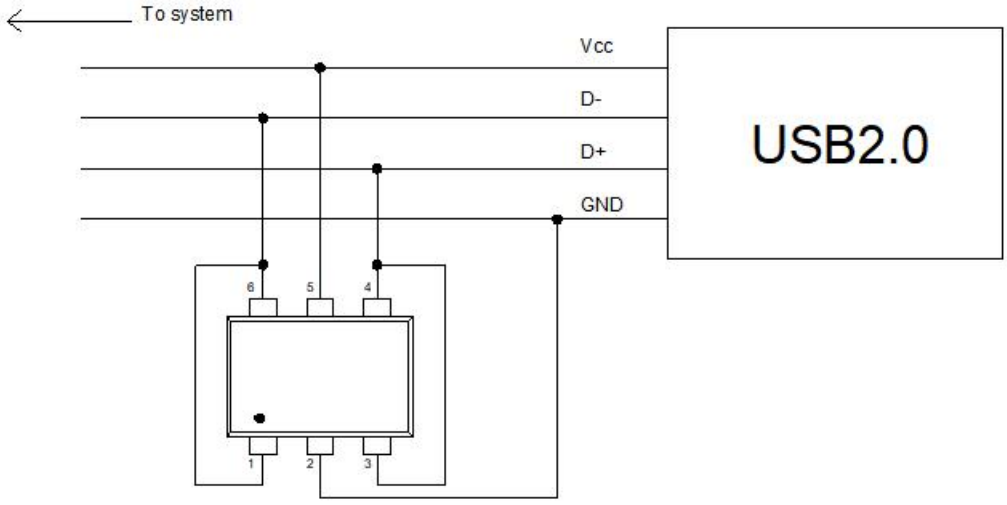
V_{RWM}	Reverse Working Voltage 反向工作电压
$V_{R(BR)}$	Reverse Breakdown Voltage 反向击穿电压@I_T=1mA
I_T	Test Current 测试电流
I_R	Reverse Leakage Current 反向漏电流@V_{RWM}
V_C	Clamping Voltage 钳位电压
I_{PP}	Reverse Peak Pulse Current 浪涌电流
C_D	Diode Capacitance 电容 V_{IO}=0V, f = 1MHz



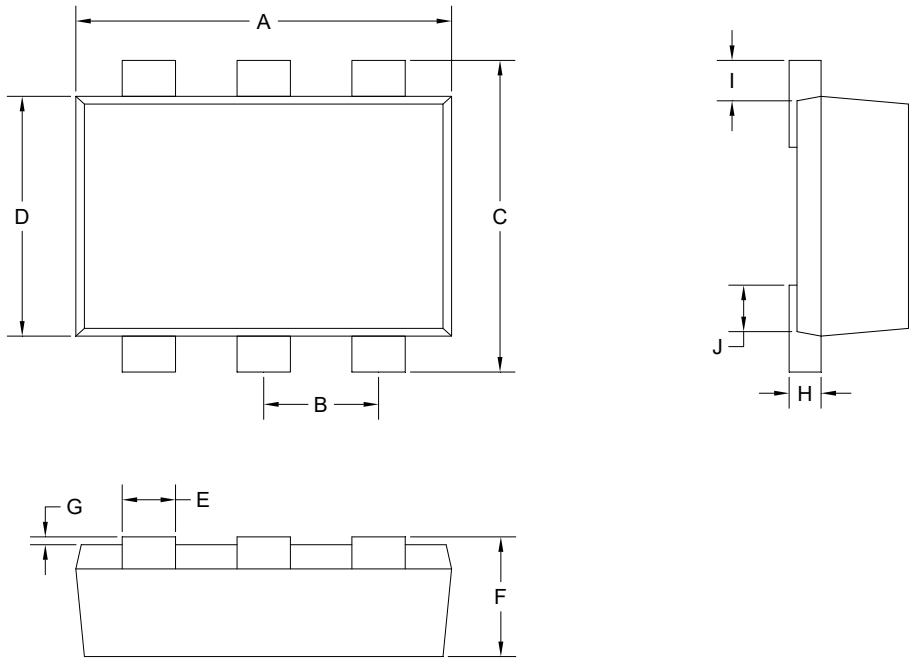
■Typical Characteristic Curve 典型特性曲线



■Typical Application 典型应用



■Dimension 外形封装尺寸



Units in millimeters

symbol	A	B	C	D	E	F	G	H	I	J
Min.	1.50	0.50	1.55	1.10	0.15	0.50	0.00	0.10	0.10	0.15
Max.	1.70	0.60	1.70	1.25	0.30	0.60	0.05	0.18	0.30	0.20