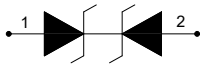
SOD-323 ESD 静电保护二极管

■Features 特点

Bidirectional 双向
ESD Protection 静电保护

■Applications 应用

Set-top box 机顶盒
Communications systems 通信系统
Portable electronics 便携式电子产品
Control & monitoring systems 控制与监视系统
Servers, notebooks, and desktop PCs bus protection
服务器、笔记本及台式机总线保护



■Device Marking 产品打标

■Absolute Maximum Ratings 最大额定值

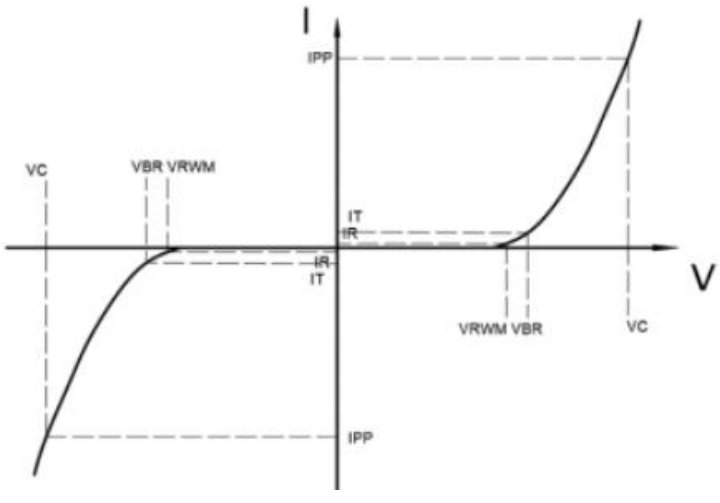
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25℃接触放电	V_{ESD}	±30	KV
ESD (IEC61000-4-2 air discharge) @25℃空气放电	V_{ESD}	±30	KV
Peak Pulse Power @25℃峰值脉冲功率	P_{PK}	250	W
Peak Pulse Current @25℃峰值脉冲电流	I_{PP}	20	A
Lead Temperature 管脚温度	T_L	260	℃
Lead Solder Time 管脚焊接时间	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

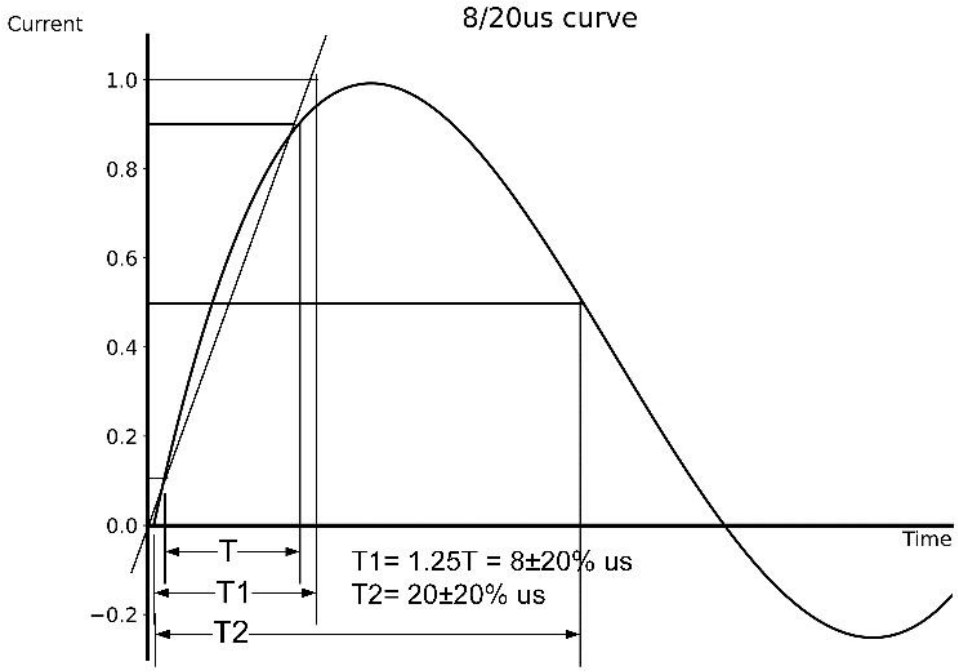
(T_A=25℃ unless otherwise noted 如无特殊说明，温度为 25℃)

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}			3.3	V	
Reverse Breakdown Voltage 反向击穿电压	V_{BR}	3.5			V	I_T=1mA
Reverse Leakage Current 反向漏电流	I_R			1	μA	V_{RWM}=3.3V
Clamping Voltage 钳位电压	V_C		8		V	I_{PP}=1A,tp=8/20μs
Clamping Voltage 钳位电压	V_C		15		V	I_{PP}=20A,tp=8/20μs
Diode Capacitance 二极管电容	C_D		60		pF	V_R=0V,f=1MHz

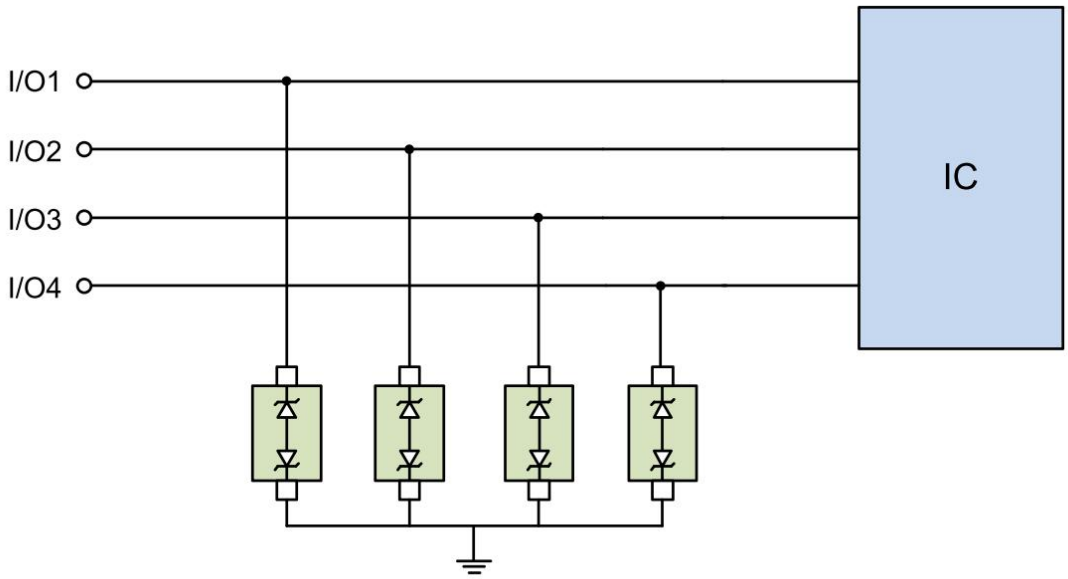
V_{RWM}	Reverse Working Voltage 反向工作电压
$V_{R(BR)}$	Reverse Breakdown Voltage 反向击穿电压@I_T=1mA
I_T	Test Current 测试电流
I_R	Reverse Leakage Current 反向漏电流@V_{RWM}
V_C	Clamping Voltage 钳位电压
I_{PP}	Reverse Peak Pulse Current 浪涌电流
C_J	Junction Capacitance 结电容 V_{IO}=0V, V_{P-P} = 30mV, f = 1MHz



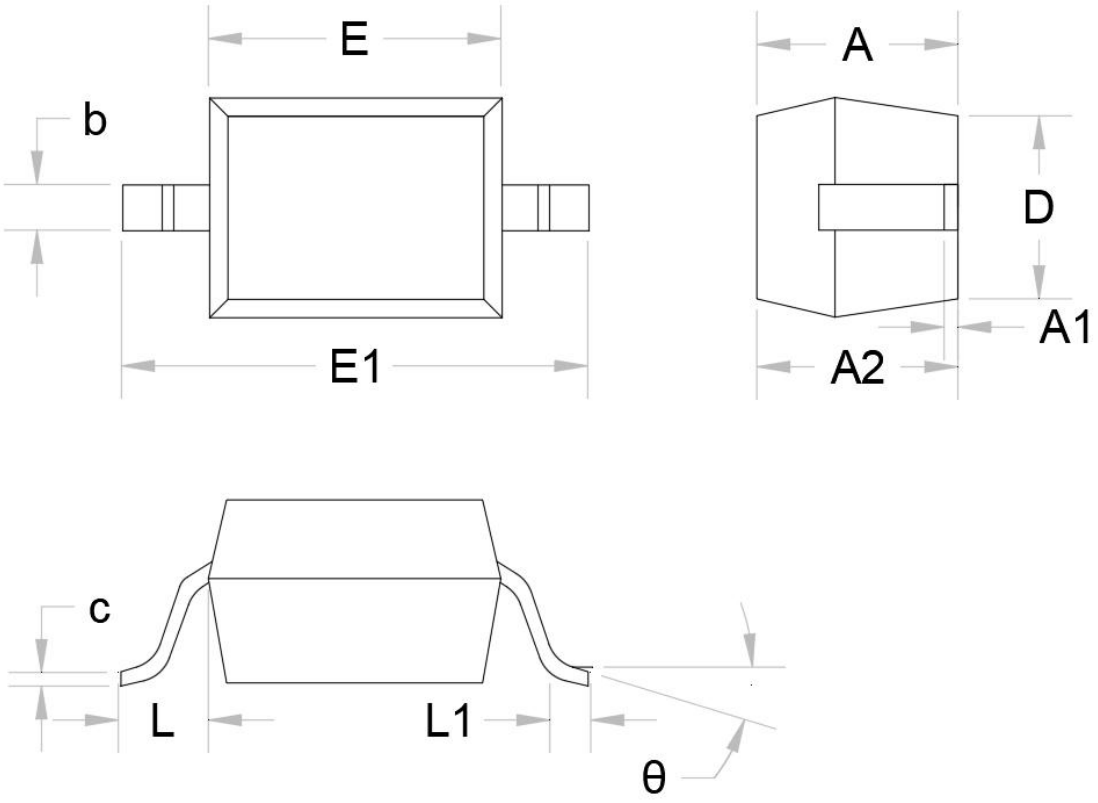
■Typical Characteristic Curve 典型特性曲线



■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		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
C	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475REF		0.019REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°