

SOD-923 ESD 静电保护二极管

■ Features 特点

Un-directional ESD Protection 单通道单向静电保护

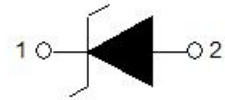
■ Applications 应用

Notebooks, desktops, and servers 笔记本、台式机和服务器

Cellular handsets and accessories 蜂窝手机及配件

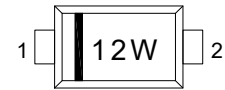
Personal Digital Assistants 个人数码助手

Peripherals 电脑外设



■ Internal Schematic Diagram 内部结构

■ Device Marking 产品打标



■ Absolute Maximum Ratings 最大额定值

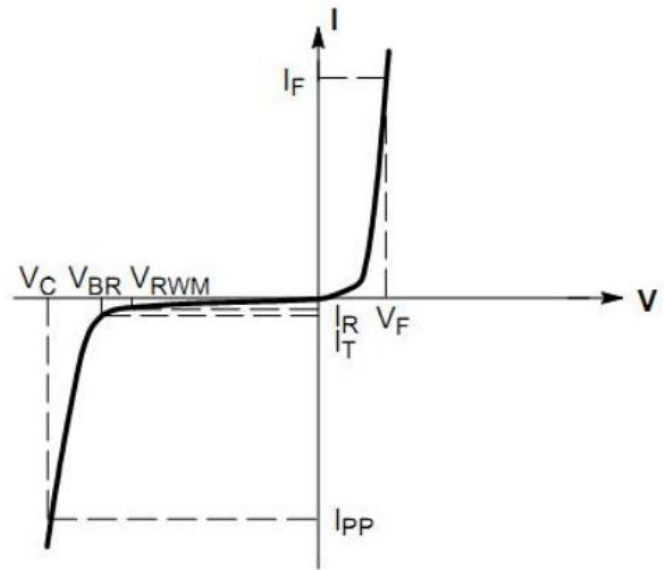
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25°C接触放电	V_{ESD}	± 30	KV
ESD (IEC61000-4-2 air discharge) @25°C空气放电	V_{ESD}	± 30	KV
Peak Pulse Power @25°C峰值脉冲功率	P_{PK}	450	W
Peak Pulse Current @25°C峰值脉冲电流	I_{PP}	16	A
Lead Temperature 管脚温度	T_L	260	°C
Lead Solder Time 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**

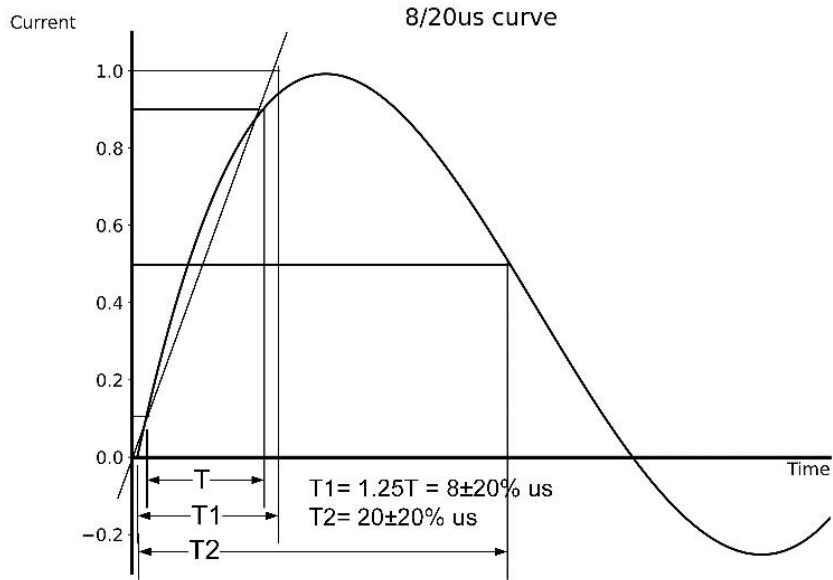
($T_A=25^\circ\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

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}			12	V	
Reverse Breakdown Voltage 反向击穿电压	V_{BR}	15.3			V	$I_T=1\text{mA}$
Reverse Leakage Current 反向漏电流	I_R			1	μA	$V_{RWM}=12\text{V}$
Clamping Voltage 钳位电压	V_C		20		V	$I_{PP}=1\text{A}, t_p=8/20\mu\text{s}$
Clamping Voltage 钳位电压	V_C		27.5		V	$I_{PP}=16\text{A}, t_p=8/20\mu\text{s}$
Diode Capacitance 二极管电容	C_D		60		pF	$V_R=0\text{V}, f=1\text{MHz}$

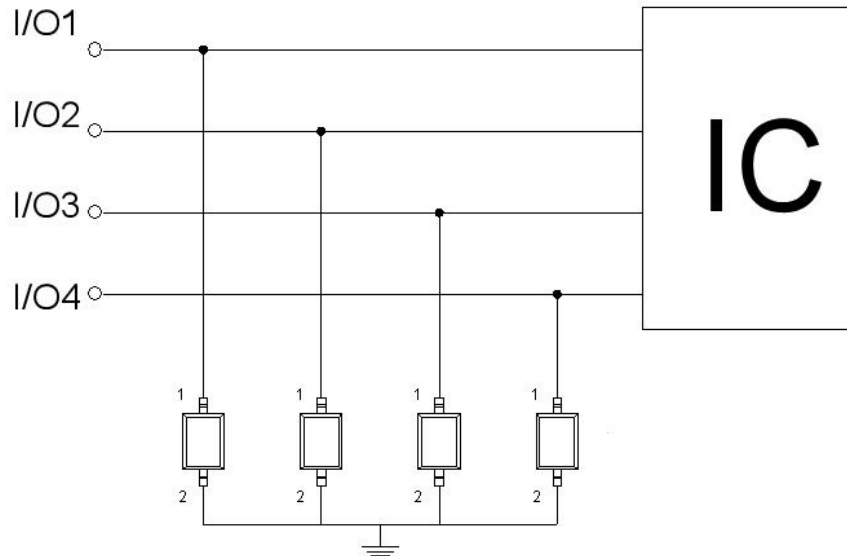
V_{RWM}	Reverse Working Voltage 反向工作电压
$V_{R(BR)}$	Reverse Breakdown Voltage 反向击穿电压@ $I_T=1\text{mA}$
I_T	Test Current 测试电流
I_R	Reverse Leakage Current 反向漏电流@ V_{RWM}
V_C	Clamping Voltage 钳位电压
I_{PP}	Reverse Peak Pulse Current 浪涌电流
C_D	Diode Capacitance 结电容 $V_{I0}=0\text{V}, f=1\text{MHz}$



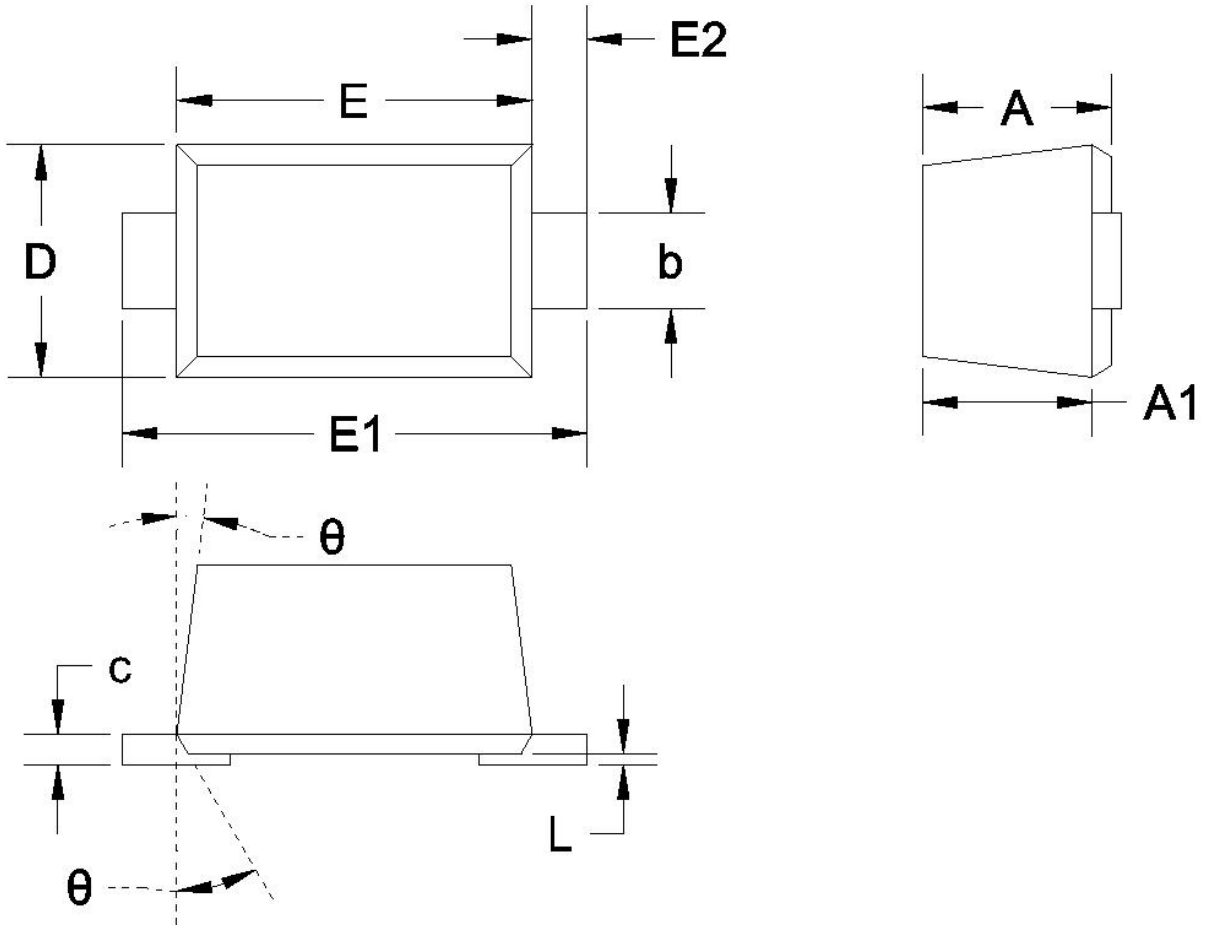
■ **Typical Characteristic Curve 典型特性曲线**



■ **Typical Application 典型应用**



■ Dimension 外形封装尺寸



Unit	A	A1	b	c	D	E	E1	E2	L	θ
Max.	0.38	0.28	0.27	0.15	0.65	0.85	1.10	0.15	0.05	7°
Min.	0.30	0.20	0.17	0.08	0.55	0.75	0.90	REF.	0.01	REF.

Units: Millimeters