

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

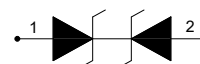
MP3 Players 播放器

Digital Cameras 数码相机

Notebooks & Handhelds 笔记本或手持机

Cellular handsets and accessories 蜂窝手机及配件

Personal Digital Assistants 个人数码助手



■ Device Marking 产品打标

G

■ Absolute Maximum Ratings 最大额定值

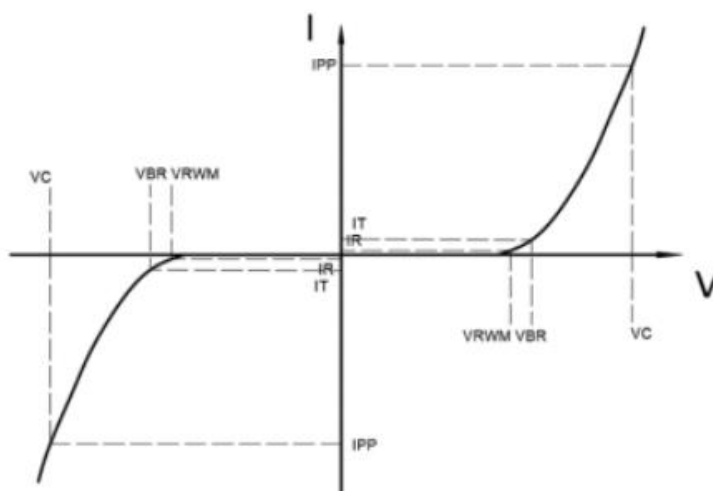
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25°C接触放电	V_{ESD}	± 25	KV
ESD (IEC61000-4-2 air discharge) @25°C空气放电	V_{ESD}	± 25	KV
Peak Pulse Power @25°C峰值脉冲功率	P_{PK}	350	W
Peak Pulse Current @25°C峰值脉冲电流	I_{PP}	20	A
Lead Temperature 管脚温度	T_L	260	°C
Lead Solder Time 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

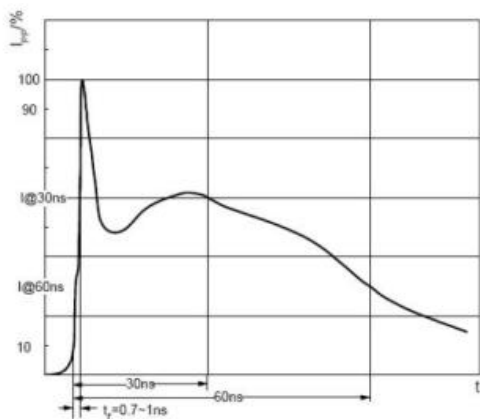
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

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}			3.3	V	
Reverse Breakdown Voltage 反向击穿电压	V_{BR}	4		7.5	V	$I_{\text{T}}=1\text{mA}$
Reverse Leakage Current 反向漏电流	I_{R}			0.2	μA	$V_{\text{RWM}}=3.3\text{V}$
Clamping Voltage 钳位电压	V_{C}		10	15	V	$I_{\text{PP}}=8\text{A}, t_{\text{p}}=8/20\mu\text{s}$
Clamping Voltage 钳位电压	V_{C}		12	18	V	$I_{\text{PP}}=20\text{A}, t_{\text{p}}=8/20\mu\text{s}$
Diode Capacitance 二极管电容	C_{D}			200	pF	$V_{\text{R}}=0\text{V}, f=1\text{MHz}$

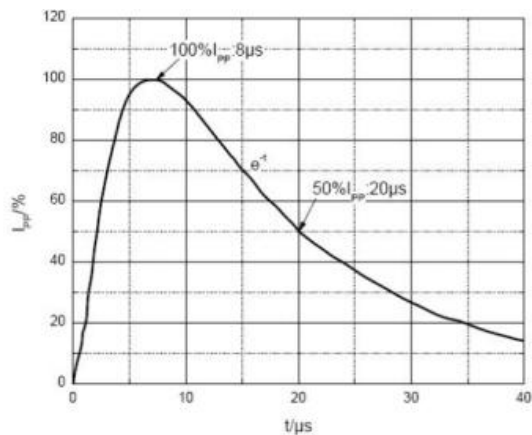
V_{RWM}	Reverse Working Voltage 反向工作电压
$V_{\text{R(BR)}}$	Reverse Breakdown Voltage 反向击穿电压@ $I_{\text{T}}=1\text{mA}$
I_{T}	Test Current 测试电流
I_{R}	Reverse Leakage Current 反向漏电流@ V_{RWM}
V_{C}	Clamping Voltage 钳位电压
I_{PP}	Reverse Peak Pulse Current 浪涌电流
C_{J}	Junction Capacitance 结电容 $V_{\text{IO}}=0\text{V},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



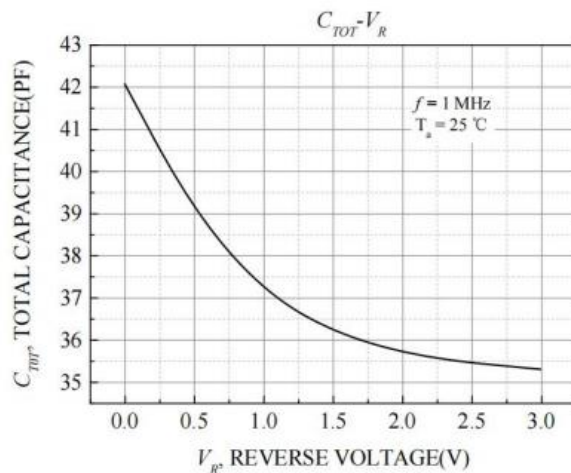
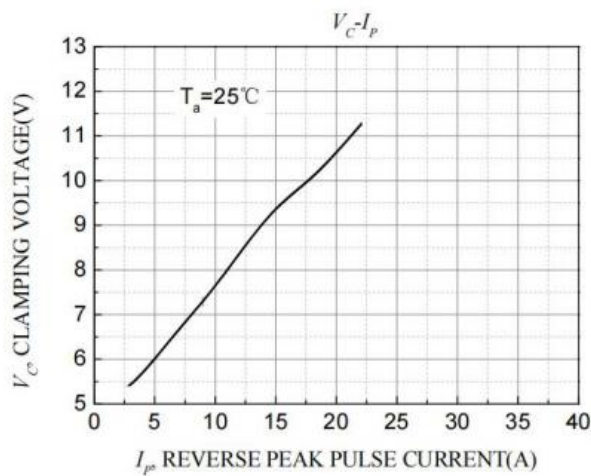
■ Typical Characteristic Curve 典型特性曲线



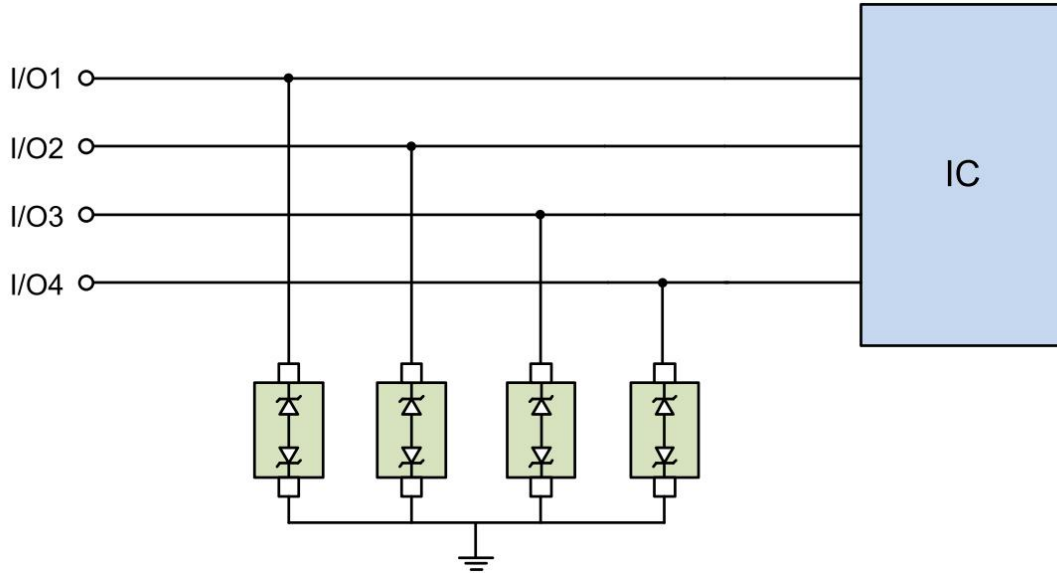
ESD pulse waveform according to IEC61000-4-2



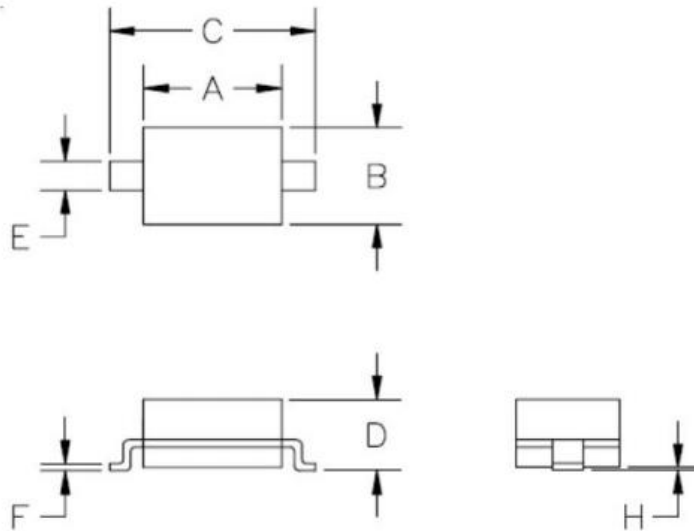
8/20 μs pulse waveform according to IEC 61000-4-5



■ Typical Application 典型应用



■ Dimension 外形封装尺寸



DIMENSIONS					
DIM ^N	INCHES		MM [1]		NOTE
	MIN	MAX	MIN	MAX	
A	.060	.071	1.5	1.8	—
B	.045	.054	1.2	1.4	—
C	.090	.107	2.3	2.7	—
D	—	.043	—	1.1	—
E	.012	.016	0.3	0.4	—
F	.004	.010	.10	.25	—
H	—	.004	—	.10	—