

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

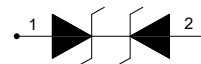
Microprocessor based equipment 微处理设备

Personal Digital Assistants (PDA's) 个人数码助手

Cell Phone Handsets and Accessories 蜂窝手机

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

7D

■ Absolute Maximum Ratings 最大额定值

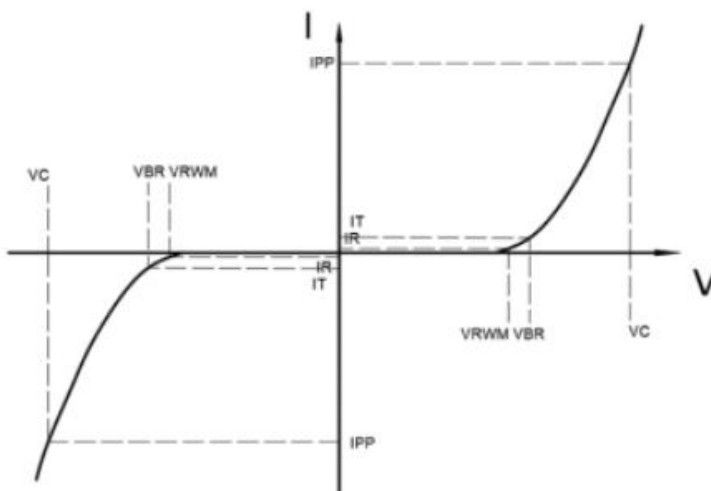
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25°C接触放电	V_{ESD}	± 30	KV
ESD (IEC61000-4-2 air discharge) @25°C空气放电	V_{ESD}	± 30	KV
Peak Pulse Power @25°C峰值脉冲功率	P_{PK}	320	W
Peak Pulse Current @25°C峰值脉冲电流	I_{PP}	20	A
Lead Temperature 管脚温度	T_L	260	°C
Lead Solder Time 管脚焊接时间	T_L	10	S
Operating Temperature 工作温度	T_{op}	-40~125	°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

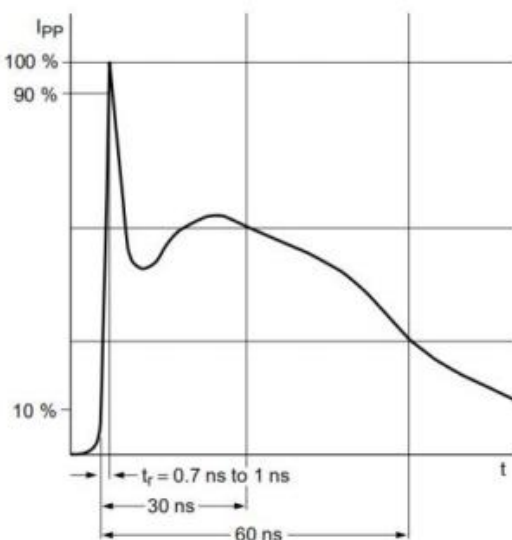
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

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}			7	V	
Reverse Breakdown Voltage 反向击穿电压	V_{BR}	8		9.4	V	$I_{\text{T}}=1\text{mA}$
Reverse Leakage Current 反向漏电流	I_{R}			0.1	μA	$V_{\text{RWM}}=7\text{V}$
Clamping Voltage 钳位电压	V_{C}		9		V	$I_{\text{PP}}=1\text{A}, t_{\text{p}}=8/20\mu\text{s}$
Clamping Voltage 钳位电压	V_{C}		15	16	V	$I_{\text{PP}}=20\text{A}, t_{\text{p}}=8/20\mu\text{s}$
Junction Capacitance 结电容	C_{J}		16	18	pF	$V_{\text{R}}=0\text{V}, f=1\text{MHz}$

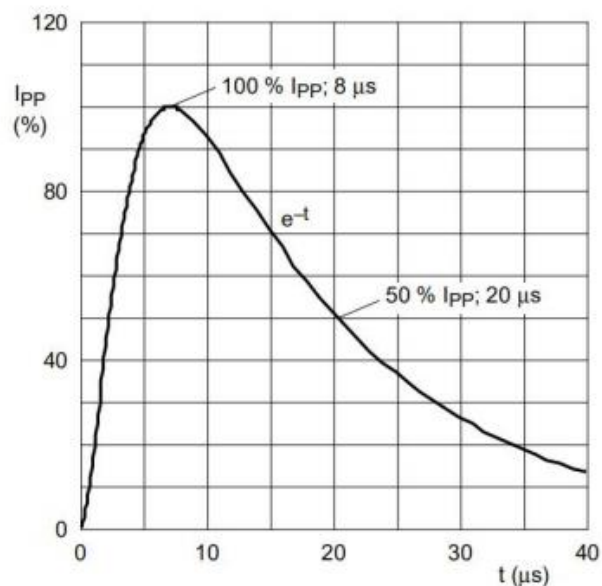
V_{RWM}	Reverse Working Voltage 反向工作电压
$V_{\text{R(BR)}}$	Reverse Breakdown Voltage 反向击穿电压@ $I_{\text{T}}=1\text{mA}$
I_{T}	Test Current 测试电流
I_{R}	Reverse Leakage Current 反向漏电流@ V_{RWM}
V_{C}	Clamping Voltage 钳位电压
I_{PP}	Reverse Peak Pulse Current 浪涌电流
C_{J}	Junction Capacitance 结电容 $V_{\text{IO}}=0\text{V},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



■ Typical Characteristic Curve 典型特性曲线

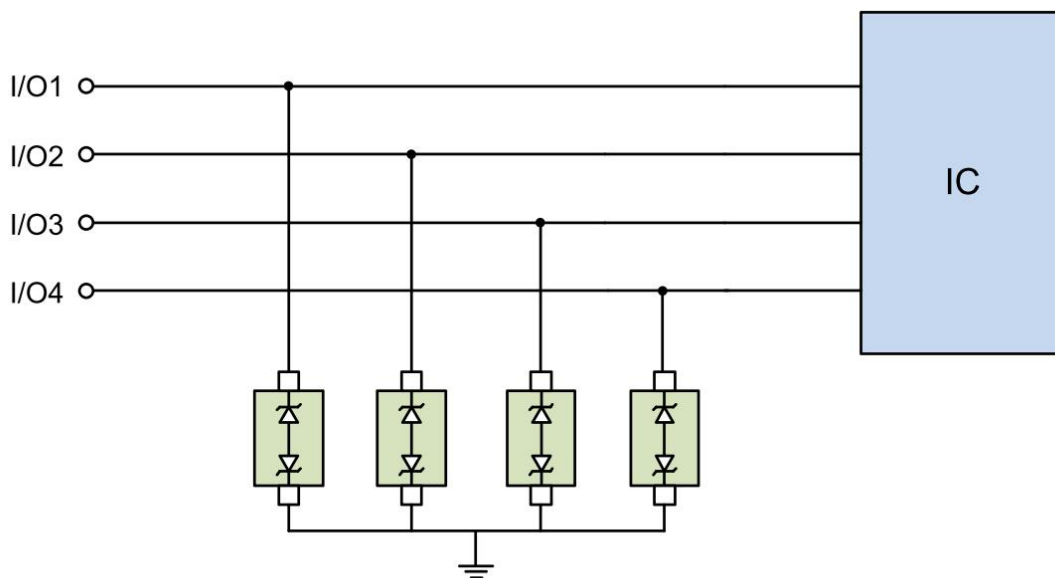


IEC61000-4-2 Waveform

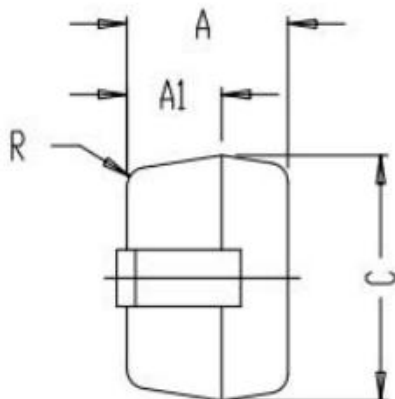
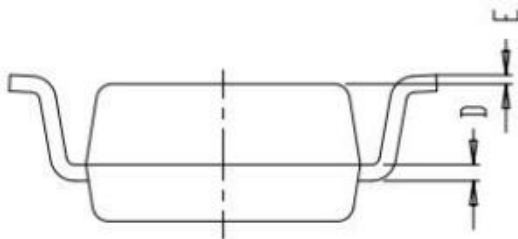
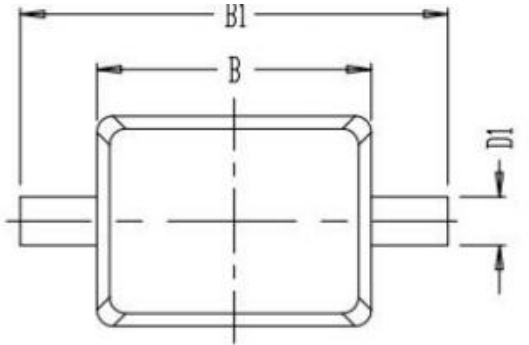


IEC 61000-4-5 Waveform(8/20 μs pulse)

■ Typical Application 典型应用



■ **Dimension 外形封装尺寸**



SYMBOL	Dimensions In Millimet	
	MIN	MAX
A	0.700	0.900
A1	0.450	0.600
B	1.600	1.800
B1	2.500	2.750
C	1.200	1.400
D	0.080	0.150
D1	0.250	0.350
E	0.000	0.100
R	0.010	0.060