

SOD-323 ESD 静电保护二极管

■ Features 特点

Un-directional 单向

ESD Protection 静电保护

■ Applications 应用

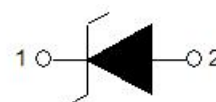
Microprocessor equipment 电脑

Power Line Protection 电源线保护

Vbat pin for Mobile Device 手机电池附件

Hand Held portable Applications 手持便携应用

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



■ Device Marking 产品打标

SD05=ZA

■ Absolute Maximum Ratings 最大额定值

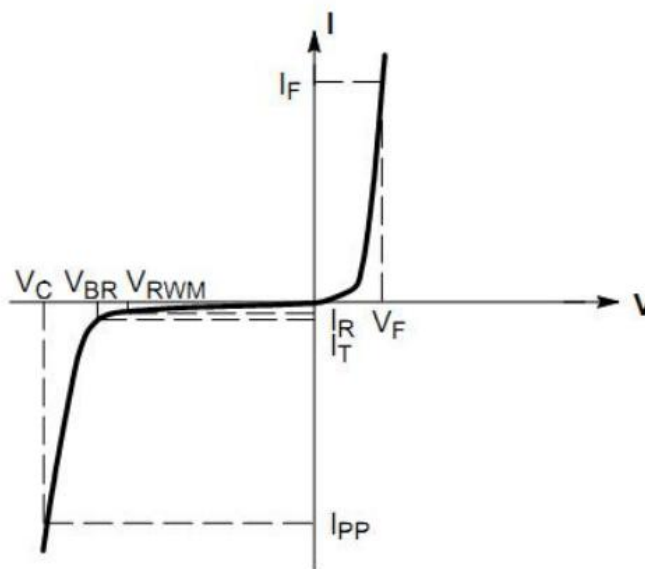
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25°C接触放电	V_{ESD}	± 30	KV
ESD (IEC61000-4-2 air discharge) @25°C空气放电	V_{ESD}	± 30	KV
Peak Pulse Power @25°C峰值脉冲功率	P_{PK}	325	W
Peak Pulse Current @25°C峰值脉冲电流	I_{PP}	25	A
Lead Temperature 管脚温度	T_L	260	°C
Lead Solder Time 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

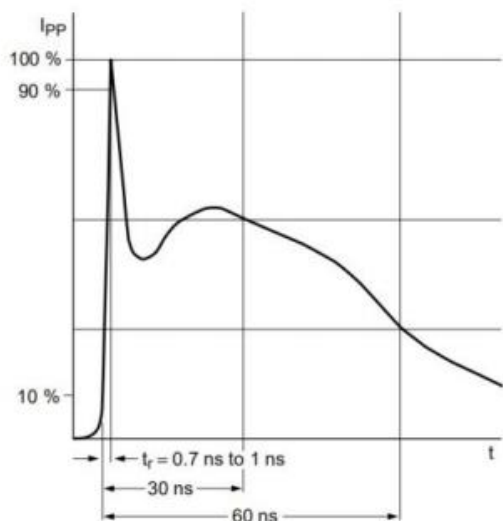
($T_A=25^\circ\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

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}			5	V	
Reverse Breakdown Voltage 反向击穿电压	V_{BR}	6.5		8	V	$I_{\text{T}}=1\text{mA}$
Reverse Leakage Current 反向漏电流	I_{R}			0.5	μA	$V_{\text{RWM}}=5\text{V}$
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}		11	13	V	$I_{\text{PP}}=25\text{A}, t_{\text{p}}=8/20\mu\text{s}$
Diode Capacitance 二极管电容	C_{D}		180	200	pF	$V_{\text{R}}=0\text{V}, f=1\text{MHz}$

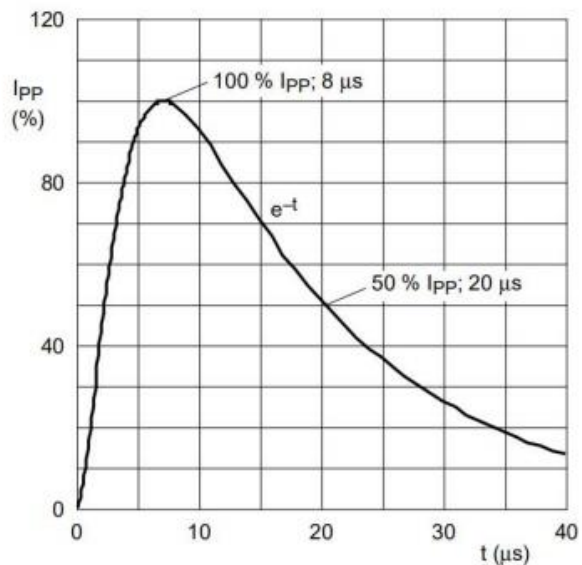
V_{RWM}	Reverse Working Voltage 反向工作电压
$V_{\text{R(BR)}}$	Reverse Breakdown Voltage 反向击穿电压@ $I_{\text{T}}=1\text{mA}$
I_{T}	Test Current 测试电流
I_{R}	Reverse Leakage Current 反向漏电流@ V_{RWM}
V_{C}	Clamping Voltage 钳位电压
I_{PP}	Reverse Peak Pulse Current 浪涌电流
C_{D}	Diode Capacitance 二极管电容 $V_{\text{IO}}=0\text{V}, V_{\text{P-P}}=30\text{mV}, f=1\text{MHz}$



■ Typical Characteristic Curve 典型特性曲线

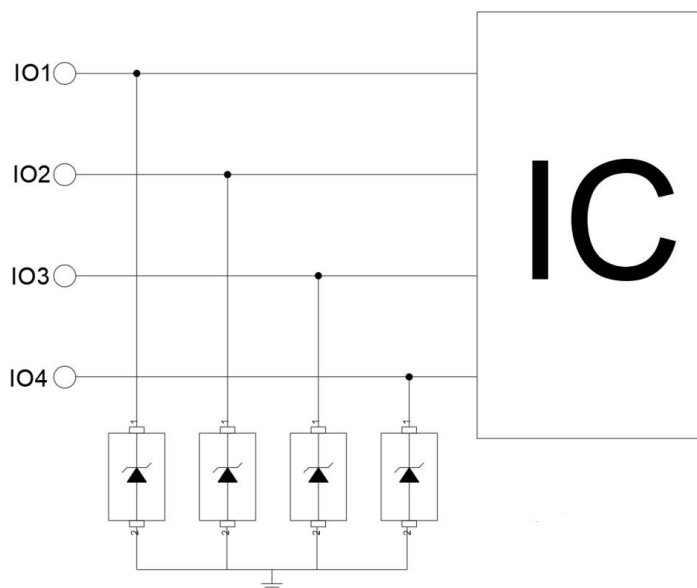


IEC61000-4-2 Waveform

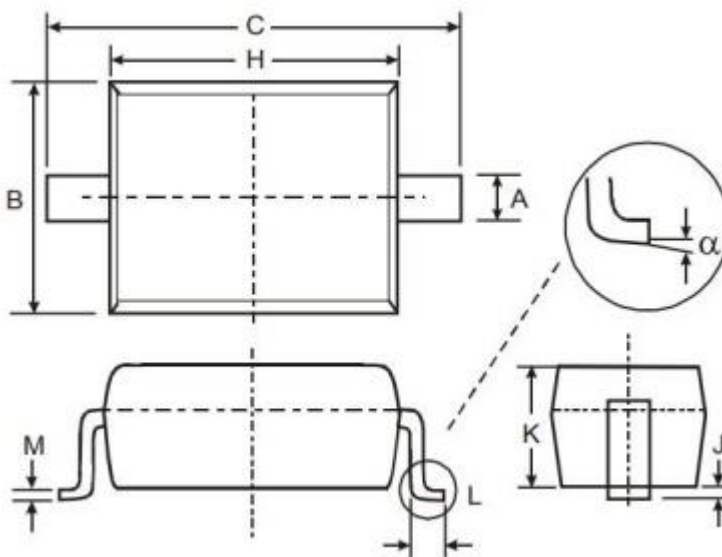


IEC 61000-4-5 Waveform(8/20μs pulse)

■ Typical Application 典型应用



■ Dimension 外形封装尺寸



SYMBOL	MILLIMETERS	
	MIN	MAX
A	0.25	0.35
B	1.20	1.40
C	2.40	2.70
H	1.60	1.80
J	0.01	0.15
K	0.70	0.90
L	0.20	0.40
M	0.08	0.15
α	0°	8°