

SOD-523 ESD 静电保护二极管

■ Features 特点

Un-directional 单向

ESD Protection 静电保护

■ Applications 应用

Power Lines 电源线

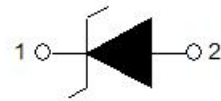
Portable Instrumentation 便携仪器仪表

Personal Digital Assistants 个人数码助手

Notebooks & Handhelds 笔记本或手持机

Microprocessor based equipment 带微处理器设备

Cellular handsets and accessories 蜂窝手机及配件



■ Device Marking 产品打标

5L

■ Absolute Maximum Ratings 最大额定值

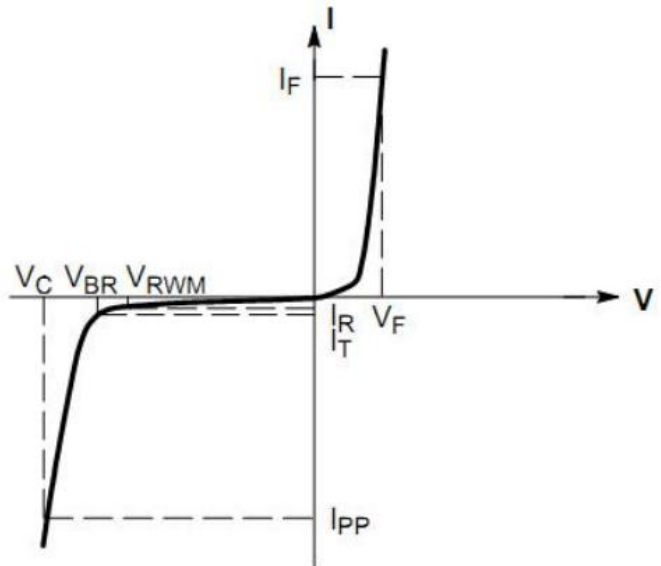
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25°C接触放电	V_{ESD}	± 15	KV
ESD (IEC61000-4-2 air discharge) @25°C空气放电	V_{ESD}	± 20	KV
Peak Pulse Power @25°C峰值脉冲功率	P_{PK}	56	W
Peak Pulse Current @25°C峰值脉冲电流	I_{PP}	4	A
Lead Temperature 管脚温度	T_L	260	°C
Lead Solder Time 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	150	°C
Storage Temperature 储存温度	T_{stg}	-55~150	°C

■ **Electrical Characteristics 电特性**

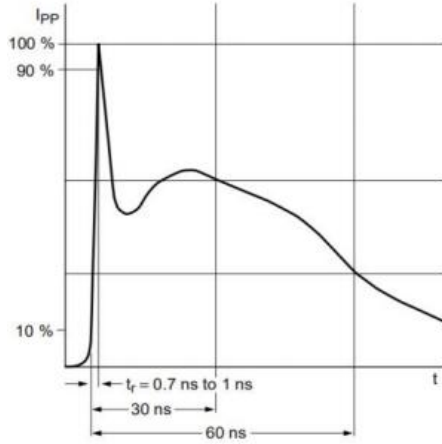
($T_A=25^\circ\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

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		9	V	$I_T=1\text{mA}$
Reverse Leakage Current 反向漏电流	I_R			0.1	μA	$V_{RWM}=5\text{V}$
Clamping Voltage 钳位电压	V_C		10		V	$I_{PP}=1\text{A}, t_p=8/20\mu\text{s}$
Clamping Voltage 钳位电压	V_C		12	14	V	$I_{PP}=4\text{A}, t_p=8/20\mu\text{s}$
Diode Capacitance 二极管电容	C_D		0.5	0.6	pF	$V_R=0\text{V}, f=1\text{MHz}$

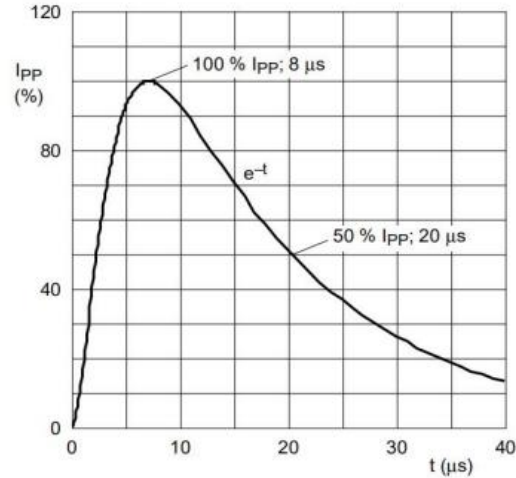
V_{RWM}	Reverse Working Voltage 反向工作电压
$V_{R(BR)}$	Reverse Breakdown Voltage 反向击穿电压@ $I_T=1\text{mA}$
I_T	Test Current 测试电流
I_R	Reverse Leakage Current 反向漏电流@ V_{RWM}
V_C	Clamping Voltage 钳位电压
I_{PP}	Reverse Peak Pulse Current 浪涌电流
C_D	Diode Capacitance 二极管电容 $V_{I0}=0\text{V}, V_{P-P}=30\text{mV}, f=1\text{MHz}$



■ Typical Characteristic Curve 典型特性曲线

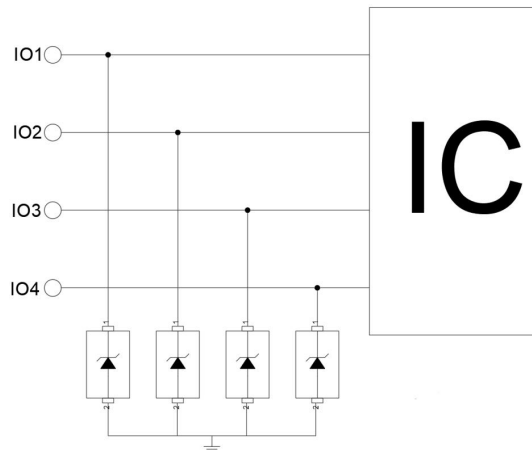


IEC61000-4-2 Waveform

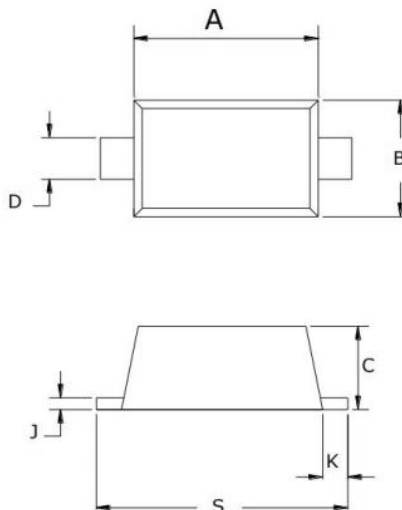


IEC 61000-4-5 Waveform(8/20µs pulse)

■ Typical Application 典型应用



■ Dimension 外形封装尺寸



SYMBOL	MILLIMETERS	
	MIN	MAX
A	1.10	1.30
B	0.70	0.90
C	0.50	0.70
D	0.25	0.35
J	0.07	0.20
K	0.15	0.25
S	1.50	1.70