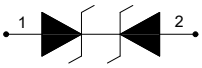
SOD-323 ESD 静电保护二极管

■Features 特点

Bidirectional 双向
ESD Protection 静电保护

■Applications 应用

Digital Cameras 数码相机
Notebooks & Handhelds 笔记本或手持机
Cellular handsets and accessories 蜂窝手机及附件
Personal Digital Assistants 个人数码助手



■Device Marking 产品打标

H

■Absolute Maximum Ratings 最大额定值

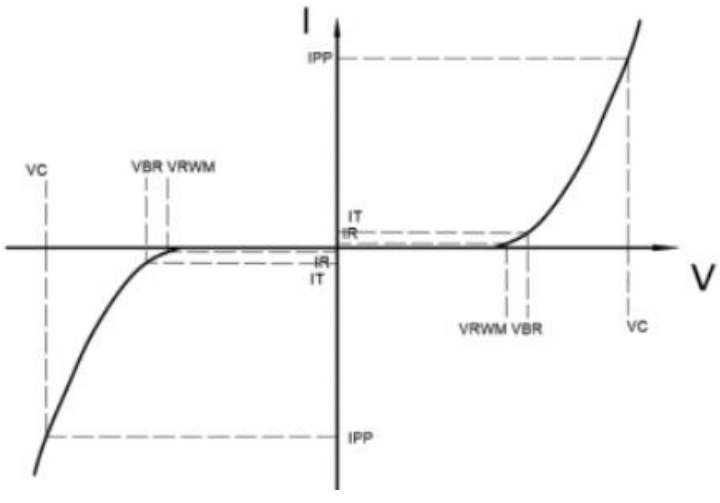
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25℃接触放电	V_{ESD}	±30	KV
ESD (IEC61000-4-2 air discharge) @25℃空气放电	V_{ESD}	±30	KV
Peak Pulse Power @25℃峰值脉冲功率	P_{PK}	350	W
Peak Pulse Current @25℃峰值脉冲电流	I_{PP}	20	A
Lead Temperature 管脚温度	T_L	260	℃
Lead Solder Time 管脚焊接时间	T_L	10	S
Operating Temperature 工作温度	T_{op}	-40~85	℃
Junction Temperature 结温	T_J	-55~125	℃
Storage Temperature 储存温度	T_{stg}	-55~150	℃

■Electrical Characteristics 电特性

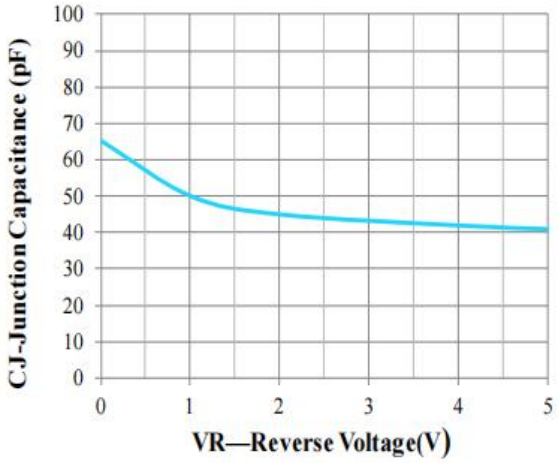
(T_A=25℃ unless otherwise noted 如无特殊说明，温度为 25℃)

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}	5.5	7.2	8.5	V	I_T=1mA
Reverse Leakage Current 反向漏电流	I_R			0.2	μA	V_{RWM}=5V
Clamping Voltage 钳位电压	V_C			9	V	I_{PP}=1A,tp=8/20μs
Clamping Voltage 钳位电压	V_C			17	V	I_{PP}=20A,tp=8/20μs
Junction Capacitance 结电容	C_J			80	pF	V_R=0V,f=1MHz

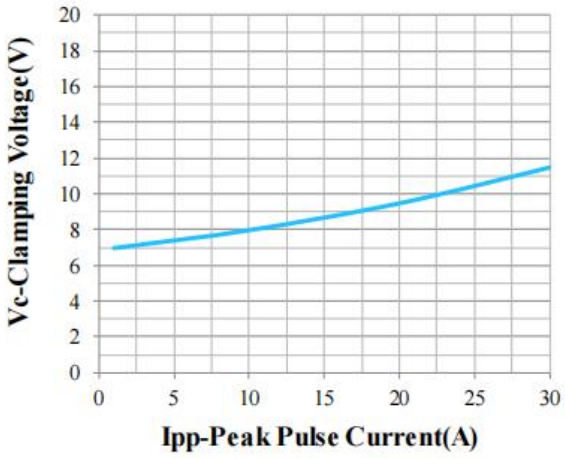
V_{RWM}	Reverse Working Voltage 反向工作电压
$V_{R(BR)}$	Reverse Breakdown Voltage 反向击穿电压@I_T=1mA
I_T	Test Current 测试电流
I_R	Reverse Leakage Current 反向漏电流@V_{RWM}
V_C	Clamping Voltage 钳位电压
I_{PP}	Reverse Peak Pulse Current 浪涌电流
C_J	Junction Capacitance 结电容 V_{IO}=0V, V_{P-P} = 30mV, f = 1MHz



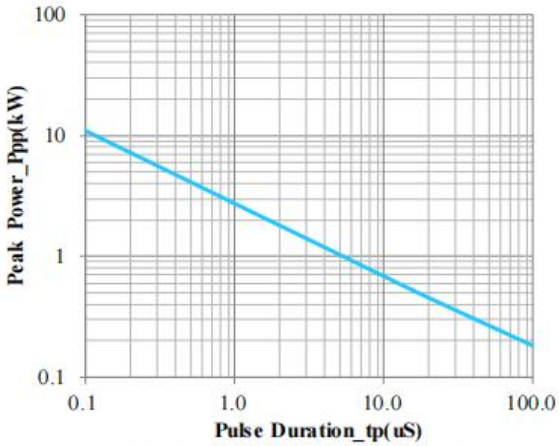
■Typical Characteristic Curve 典型特性曲线



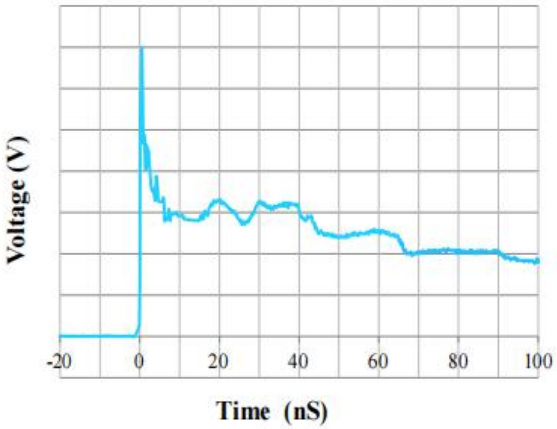
Junction Capacitance vs. Reverse Voltage



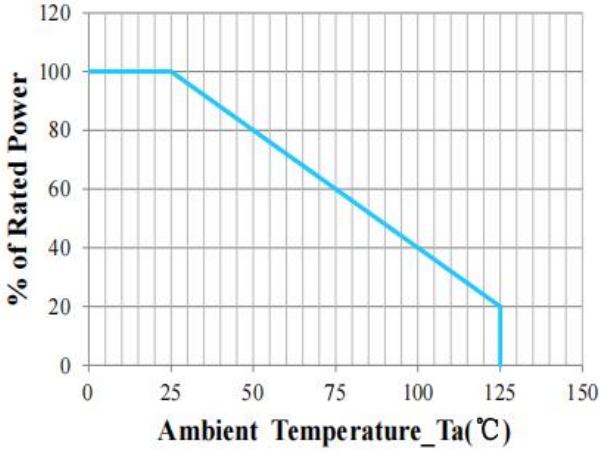
Clamping Voltage vs. Peak Pulse Current



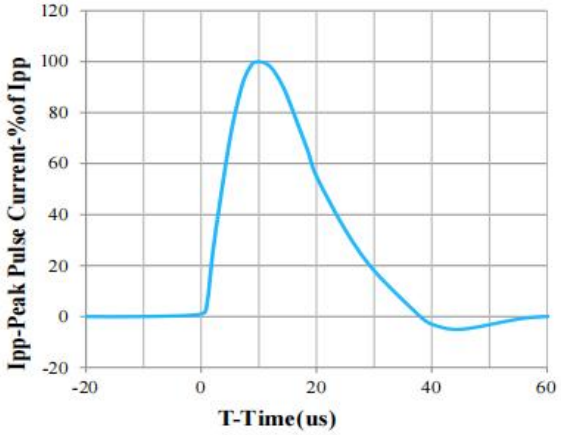
Peak Pulse Power vs. Pulse Time



IEC61000-4-2 Pulse Waveform

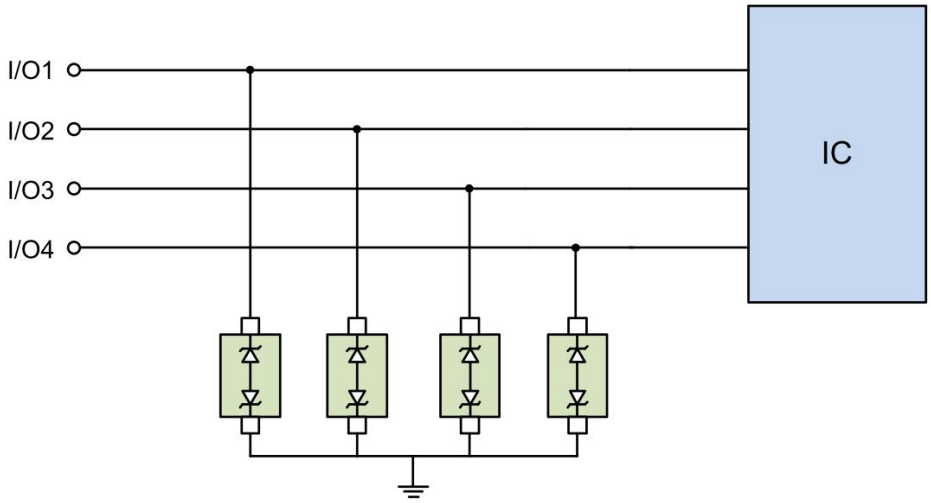


Power Derating Curve

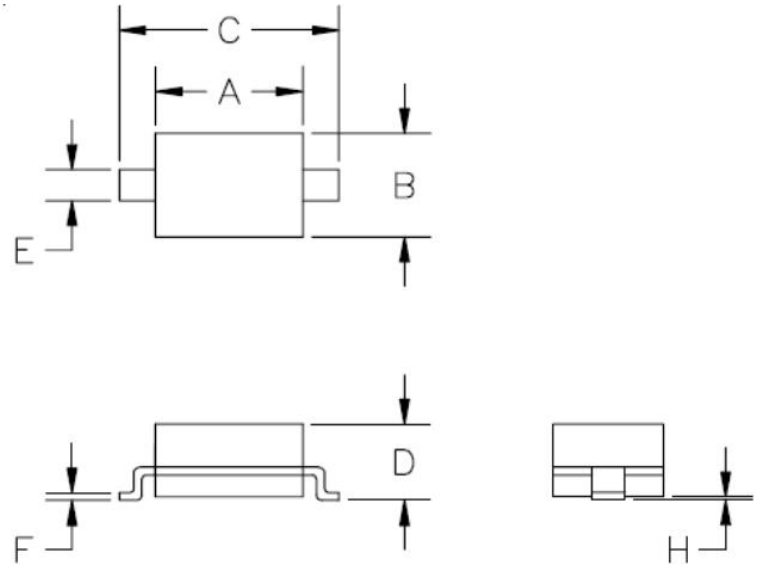


8 X 20us Pulse Waveform

■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	–