



## SOD-323 ESD 静电保护二极管

### ■ Features 特点

Bidirectional 双向

Ultra-low Capacitance 超低电容



### ■ Applications 应用

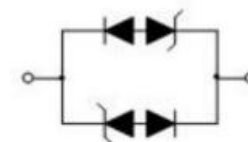
I/O Interfaces 输入输出接口

Industrial and Service Robots 工业和服务机器人

Laptops and Desktops 便携和台式电脑

TV and Monitors 电视和监视器

Wearables 可穿戴电子产品



### ■ Device Marking 产品打标

FSLC3D5V1BD=C05

### ■ 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	$V_{ESD}$	$\pm 30$	KV
ESD (IEC61000-4-2 air discharge) @25°C空气放电	$V_{ESD}$	$\pm 30$	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

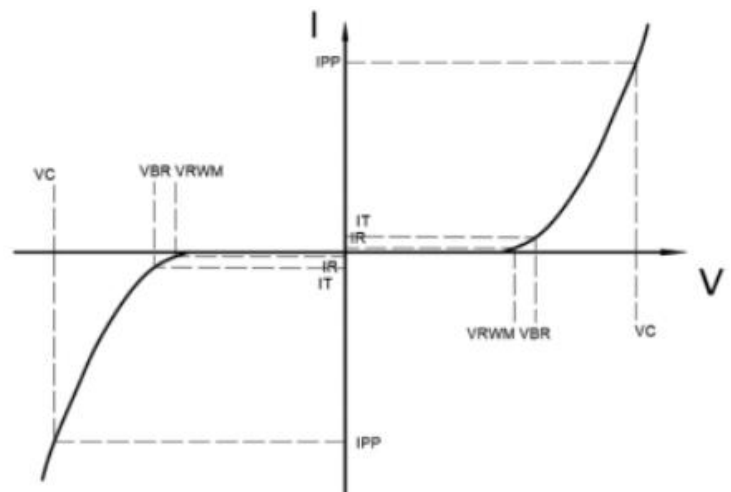


## ■ Electrical Characteristics 电特性

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

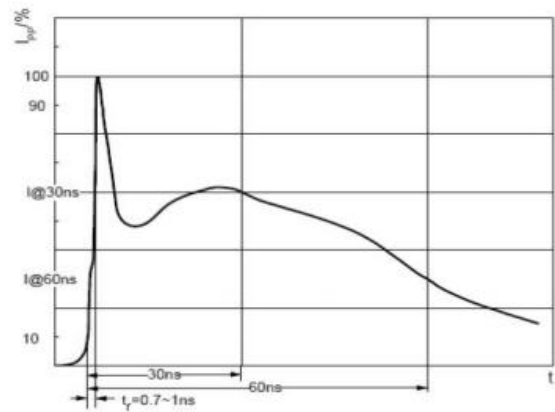
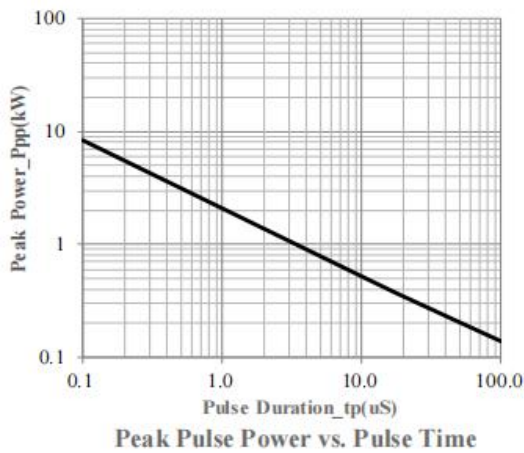
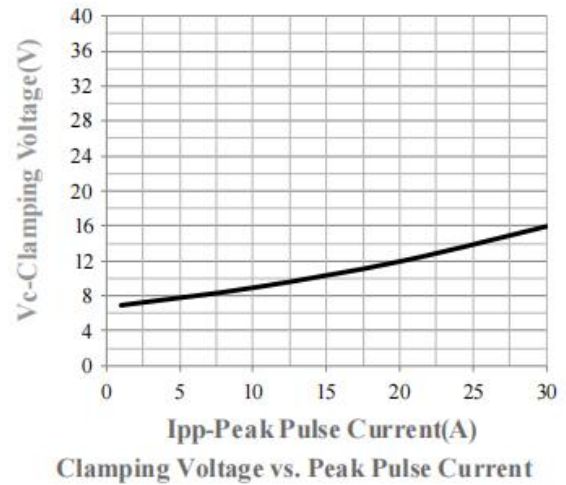
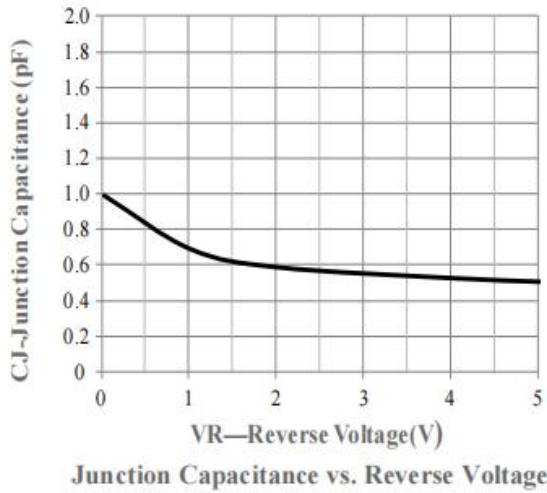
Characteristic Parameters 特性参数	Symbol 符号	Min 最小值	Typ 典型值	Max 最大值	Unit 单位	Condition 条件
Reverse Stand-off Voltage 反向工作电压	$V_{RWM}$			5	V	
Reverse Breakdown Voltage 反向击穿电压	$V_{R(BR)}$	7		9	V	$I_T=1\text{mA}$
Reverse Leakage Current 反向漏电流	$I_R$			0.5	$\mu\text{A}$	$V_{RWM}=\pm 5\text{V}$
Clamping Voltage 钳位电压	$V_C$		8.5		V	$I_{PP}=1\text{A}, t_p=8/20\mu\text{s}$
Clamping Voltage 钳位电压	$V_C$		12		V	$I_{PP}=20\text{A}, t_p=8/20\mu\text{s}$
Diode Capacitance 二极管电容	$C_D$		1		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 $V_{I0}=0\text{V}, V_{P-P}=30\text{mV}, f=1\text{MHz}$

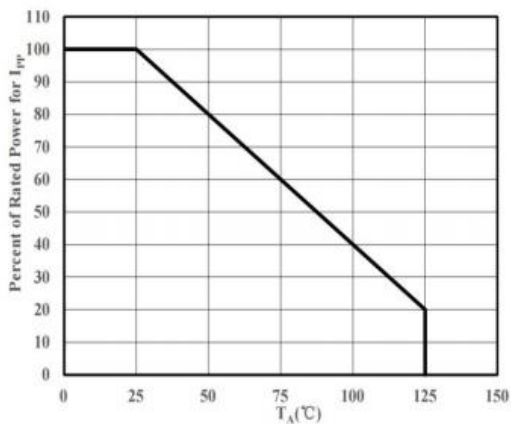




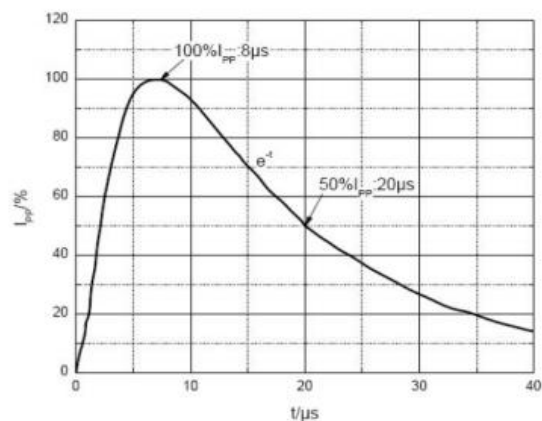
## ■ Typical Characteristic Curve 典型特性曲线



ESD pulse waveform according to IEC61000-4-2

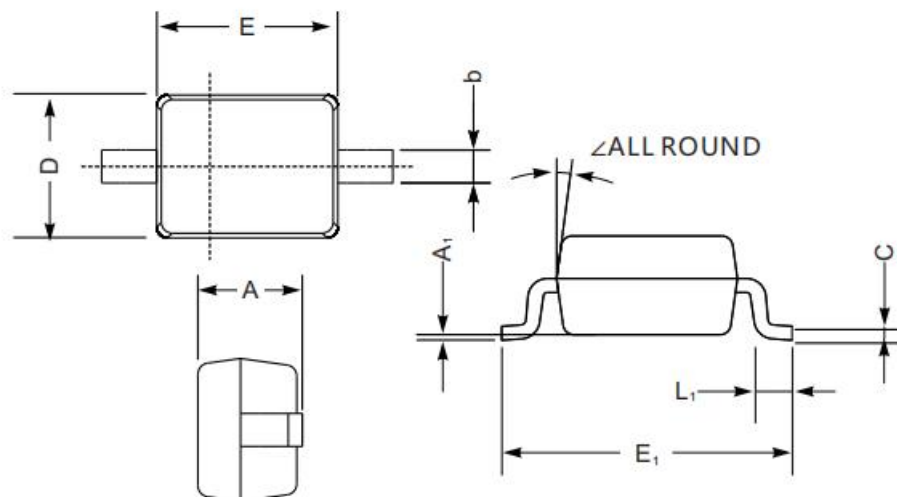


Power Derating Curve



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

## ■ Dimension 外形封装尺寸



UNIT		A	C	D	E	E <sub>1</sub>	b	L <sub>1</sub>	A <sub>1</sub>	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	