



# 安徽富信半导体科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD.

FSNC3D\*\*1U

## 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

USB/GPIO 便携输入输出及图形接口

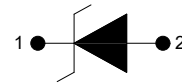
Industrial and Serve Robots 工业和服务机器人

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

Handheld-wireless Systems 手持无线系统



### ■ Device Marking 产品打标

V <sub>RWM</sub> (V)	3.3	5	7	12	15	24	36
Marking	03W	05W	07W	12W	15W	24W	36W

### ■ Absolute Maximum Ratings 最大额定值

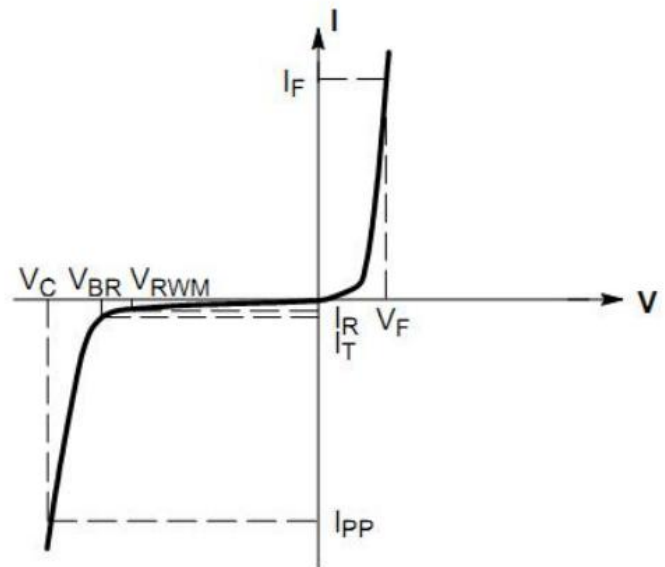
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25°C接触放电	V <sub>ESD</sub>	±30	KV
ESD (IEC61000-4-2 air discharge) @25°C空气放电	V <sub>ESD</sub>	±30	KV
Peak Pulse Power @25°C峰值脉冲功率	P <sub>PK</sub>	350	W
Forward Voltage 正向电压@I <sub>F</sub> =10mA	V <sub>F</sub>	0.8	V
Lead Temperature 管脚温度	T <sub>L</sub>	260	°C
Lead Solder Time 管脚焊接时间	T <sub>L</sub>	10	S
Operating Temperature 工作温度	T <sub>op</sub>	-40~85	°C
Junction Temperature 结温	T <sub>J</sub>	-55~125	°C
Storage Temperature 储存温度	T <sub>stg</sub>	-55~150	°C

## ■ Electrical Characteristics 电特性

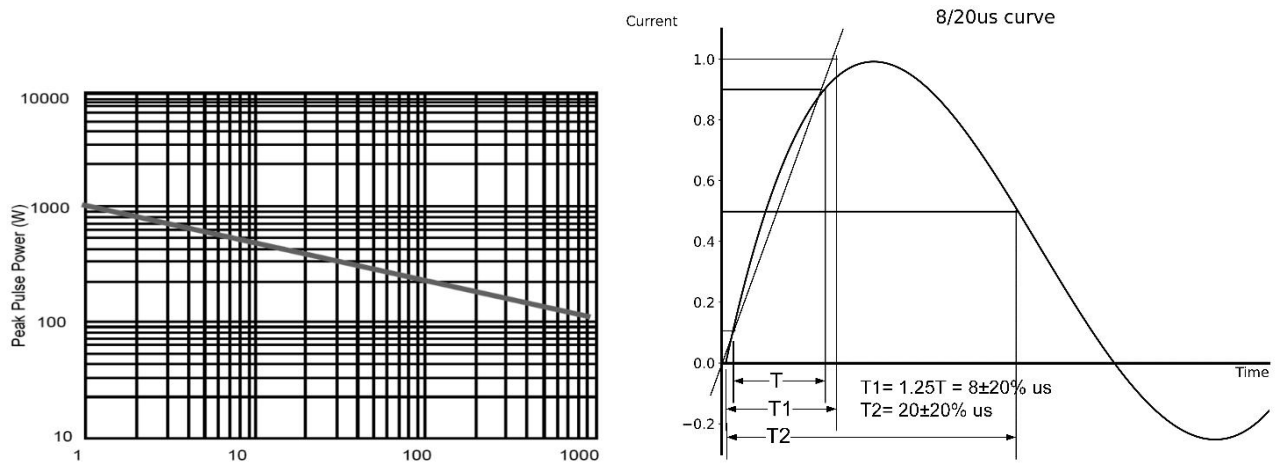
( $T_A=25^{\circ}\text{C}$  unless otherwise noted 如无特殊说明, 温度为  $25^{\circ}\text{C}$ )

Part No.型号	$V_{RWM}(V)$	$V_{R(BR)}(V)$	$V_C(V)@I_T=1A$	$I_{PP}(A)$	$V_C(V)@I_T=I_{PP}$	$I_R(\mu A)$	$C_J(pF)$
FSNC3D3V1U	3.3	4.5	8.0	24.0	19.0	1.0	300
FSNC3D5V1U	5.0	6.5	9.0	20.0	20.0	1.0	300
FSNC3D7V1U	7.0	7.5	10.0	15.0	23.0	1.0	200
FSNC3D12V1U	12.0	13.3	19.0	12.0	33	1.0	150
FSNC3D15V1U	15.0	16.5	24	9.0	50	1.0	120
FSNC3D24V1U	24.0	26.0	38	6.0	60	1.0	80
FSNC3D36V1U	36.0	38.0	55	4.0	70	1.0	50

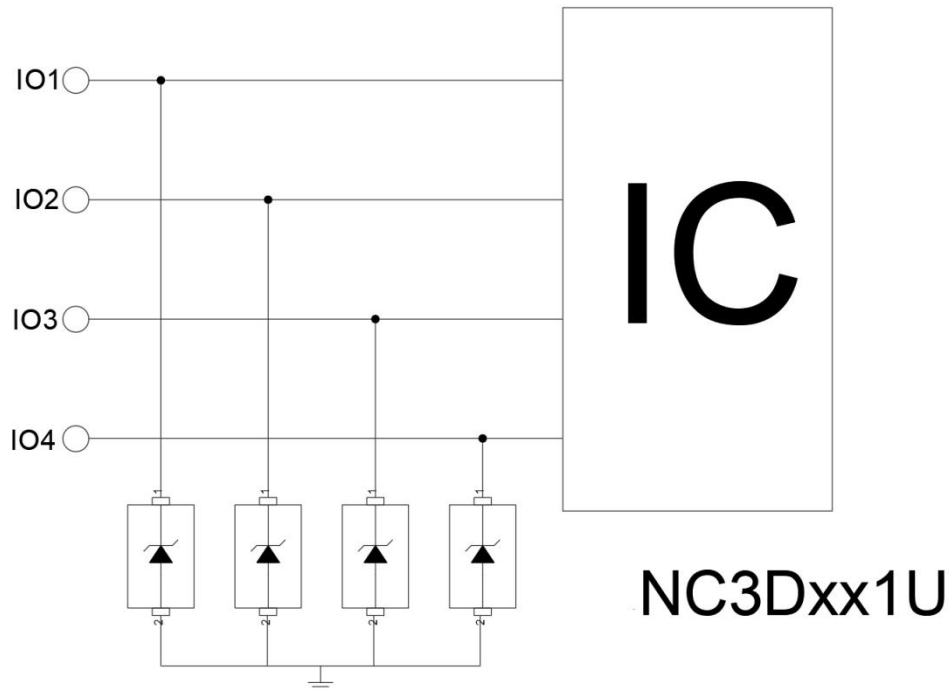
$V_{RWM}$	Reverse Working Voltage 反向工作电压
$V_{R(BR)}$	Reverse Breakdown Voltage 反向击穿电压@ $I_T=1mA$
$I_T$	Test Current 测试电流
$I_R$	Reverse Leakage Current 反向漏电流@ $V_{RWM}$
$V_C$	Clamping Voltage 钳位电压
$I_{PP}$	Reverse Peak Pulse Current 浪涌电流
$C_J$	Junction Capacitance 结电容 $V_{IO}=0V, V_{P-P} = 30mV, f = 1MHz$



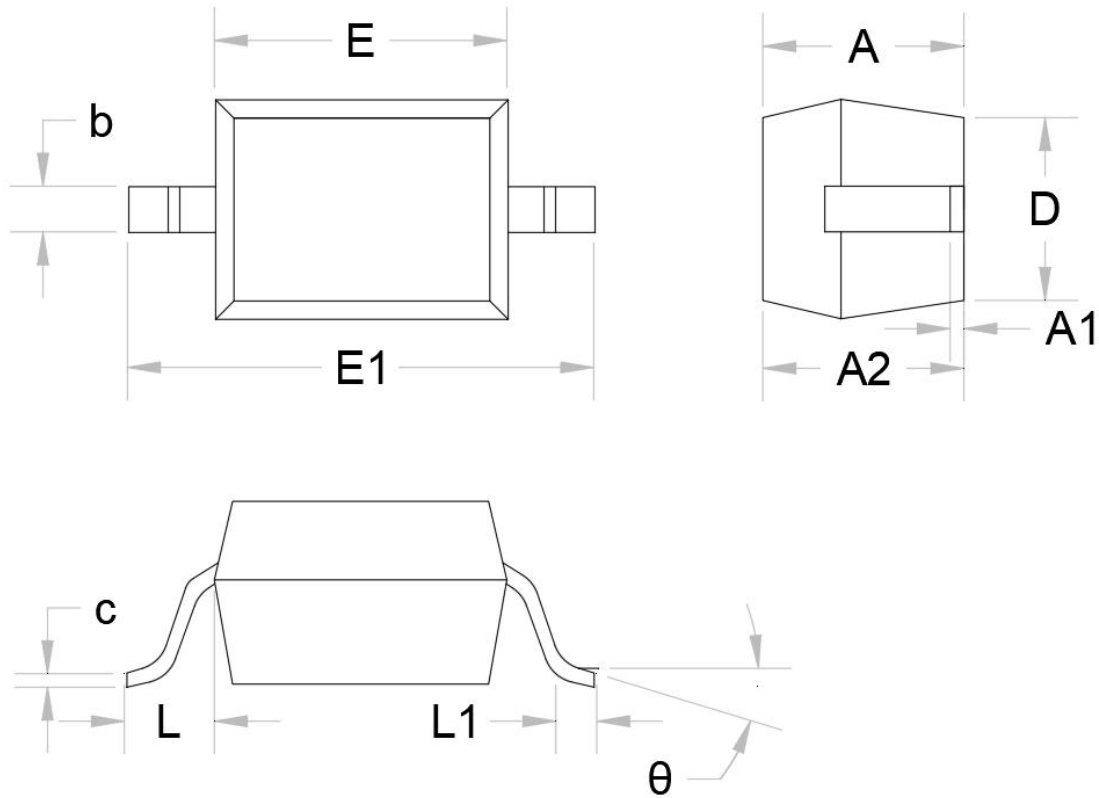
## ■ Typical Characteristic Curve 典型特性曲线



## ■ Typical Application 典型应用



## Dimension 外形封装尺寸



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
C	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475REF		0.019REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°