



# 安徽富信半导体科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD.

FSHC3F\*\*1U

## DFN2x2-3L ESD 静电保护二极管

### ■ Features 特点

Un-directional ESD Protection 单通道单向静电保护

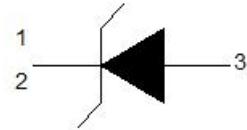
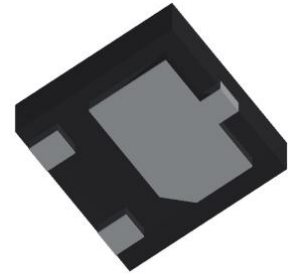
### ■ Applications 应用

Notebooks, desktops, and servers 笔记本、台式机和服务服务器

Cellular handsets and accessories 蜂窝手机及配件

Personal Digital Assistants 个人数码助手

Portable Instrumentation 桌面仪器



### ■ Internal Schematic Diagram 内部结构

### ■ Device Marking 产品打标

V <sub>RWM</sub> (V)	5	7	10	12	15	24
Marking						

### ■ Absolute Maximum Ratings 最大额定值

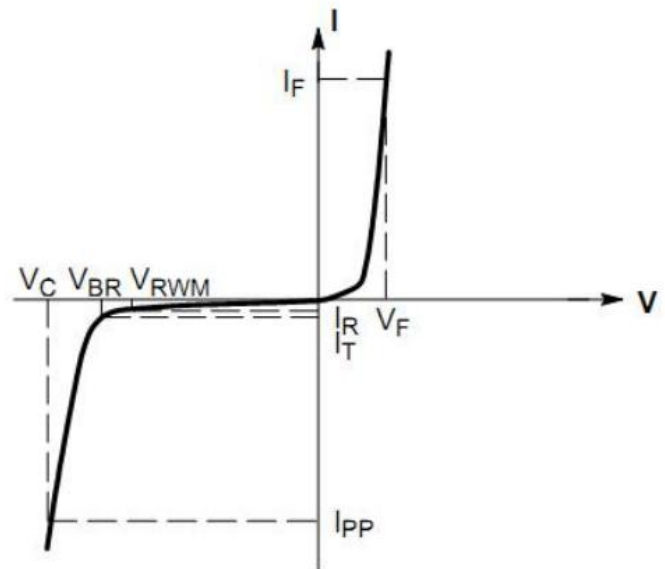
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25°C接触放电	V <sub>ESD</sub>	±30	KV
ESD (IEC61000-4-2 air discharge) @25°C空气放电	V <sub>ESD</sub>	±30	KV
Peak Pulse Power @25°C峰值脉冲功率	P <sub>PK</sub>	6000	W
Lead Temperature 管脚温度	T <sub>L</sub>	260	°C
Lead Solder Time 管脚焊接时间	T <sub>L</sub>	10	S
Operating Temperature 工作温度	T <sub>op</sub>	-40~125	°C
Junction Temperature 结温	T <sub>J</sub>	-55~150	°C
Storage Temperature 储存温度	T <sub>stg</sub>	-55~150	°C

## ■ Electrical Characteristics 电特性

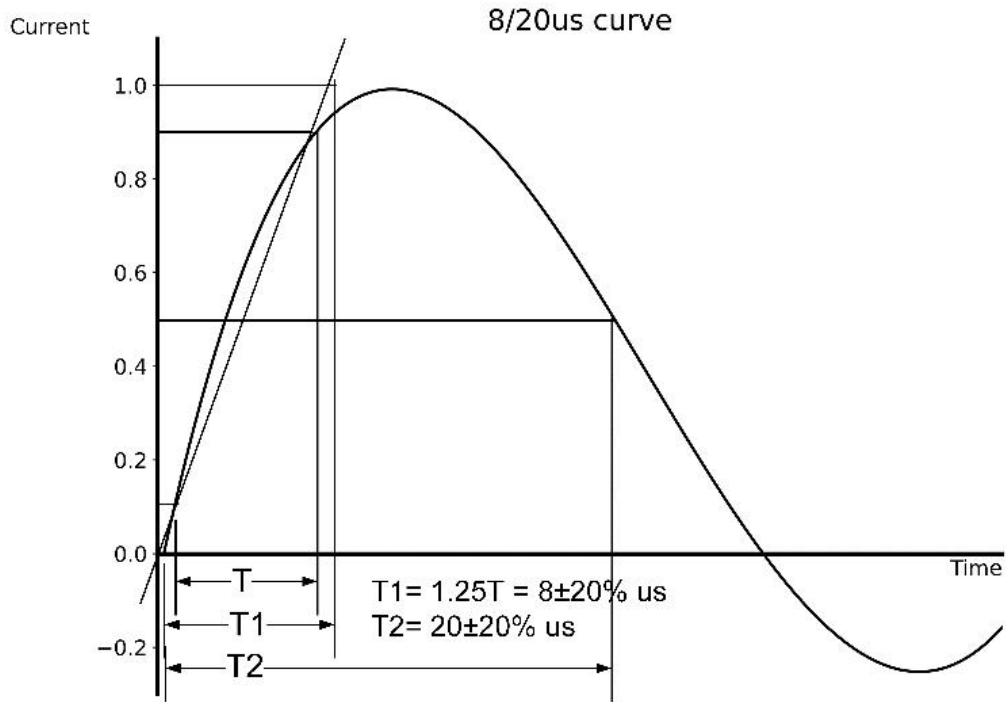
( $T_A=25^{\circ}\text{C}$  unless otherwise noted 如无特殊说明, 温度为  $25^{\circ}\text{C}$ )

Part No.型号	$V_{RWM}(V)$	$V_{R(BR)}(V)$	$V_C(V)@I_T=1A$	$I_{PP}(A)$	$V_C(V)@I_T=I_{PP}$	$I_R(\mu A)$	$C_J(pF)$
FSHC3F5V1U	5.0	6.0	7.5	300	20.0	1.0	3200
FSHC3F7V1U	7.0	8.0	9.0	200	18.0	1.0	1800
FSHC3F10V1U	10.0	12	13.5	200	26.0	1.0	1500
FSHC3F12V1U	12.0	13.3	15.0	180	30.0	1.0	1400
FSHC3F15V1U	15.0	16.5	18.5	130	35.0	1.0	1000
FSHC3F24V1U	24.0	26.0	30	100	54.0	1.0	800

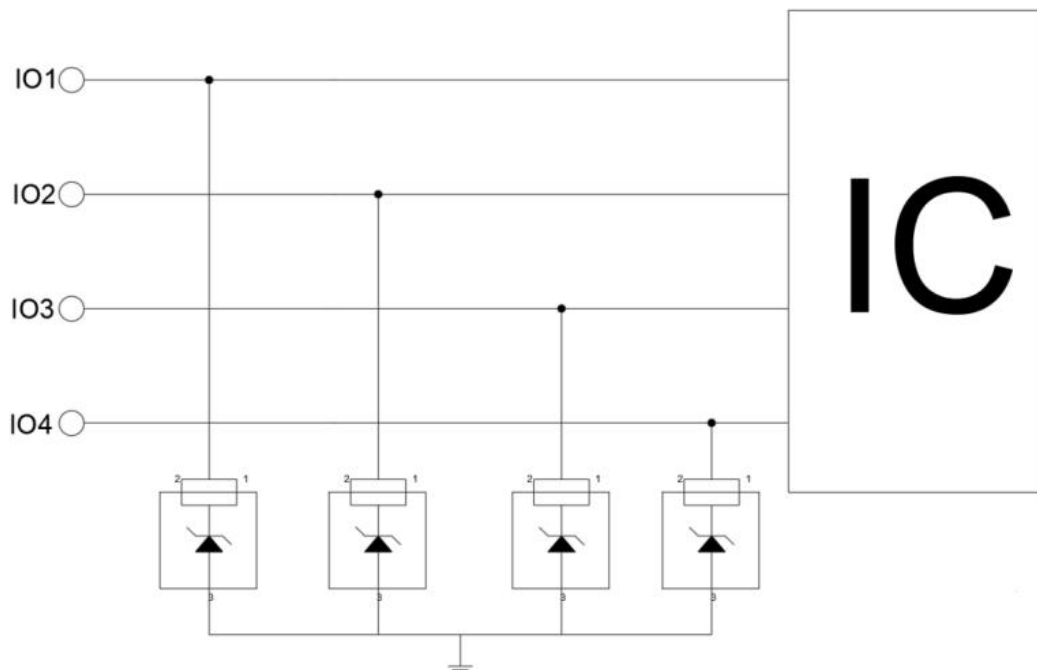
$V_{RWM}$	Reverse Working Voltage 反向工作电压
$V_{R(BR)}$	Reverse Breakdown Voltage 反向击穿电压@ $I_T=1mA$
$I_T$	Test Current 测试电流
$I_R$	Reverse Leakage Current 反向漏电流@ $V_{RWM}$
$V_C$	Clamping Voltage 钳位电压
$I_{PP}$	Reverse Peak Pulse Current 浪涌电流
$C_J$	Junction Capacitance 结电容 $V_{IO}=0V, V_{P-P} = 30mV, f = 1MHz$



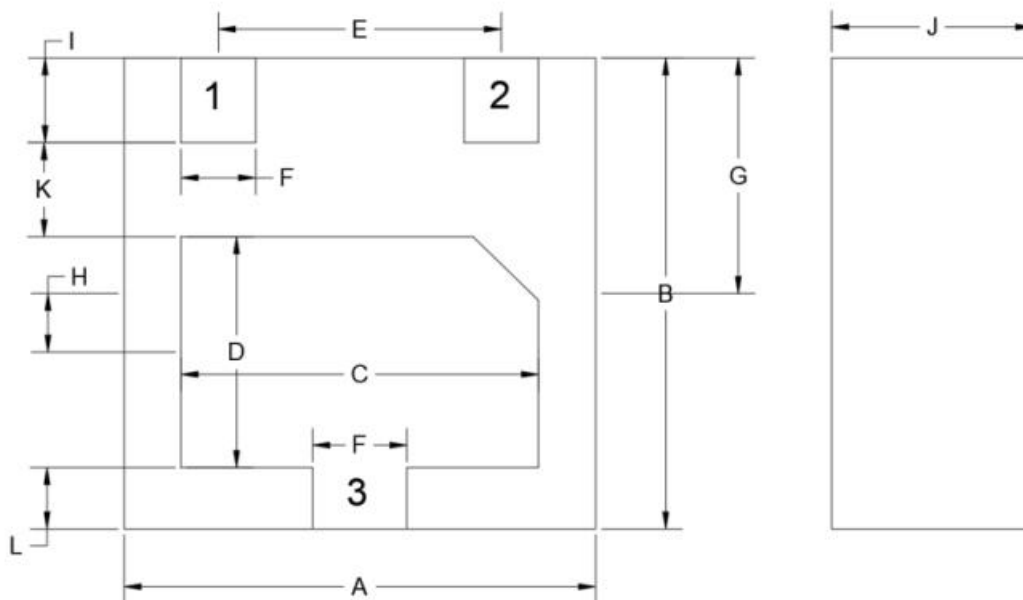
## ■ Typical Characteristic Curve 典型特性曲线



## ■ Typical Application 典型应用



## Dimension 外形封装尺寸



Units: Millimeters

Dim	A	B	C	D	E	F	G	H	I	J	K	L
Min	1.90	1.90	1.40	0.90	1.30	0.25	0.95	0.20	0.35	0.65	0.30	0.15
Max	2.10	2.10	1.60	1.10	BSC	0.35	1.05	0.30	0.45		0.35	0.20