



# 安徽富信半导体科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD.

FSUC2X5V1BA

## DFN0603-2L ESD 静电保护二极管

### ■Features 特点

Ultra-low capacitance ESD Protection 极低电容静电保护

- ±15kV Contact Discharge 接触放电

- ±15kV Air Discharge 空气放电

### ■Applications 应用

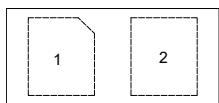
Notebooks Computer 笔记本电脑

SIM Ports and Ethernet 用户识别和以太网

USB&ATM Interface 移动 U 盘及自动柜员机接口

Monitors and flat panel display 监视器和平板显示器

### ■Internal Schematic Diagram 内部结构



### ■Absolute Maximum Ratings 最大额定值

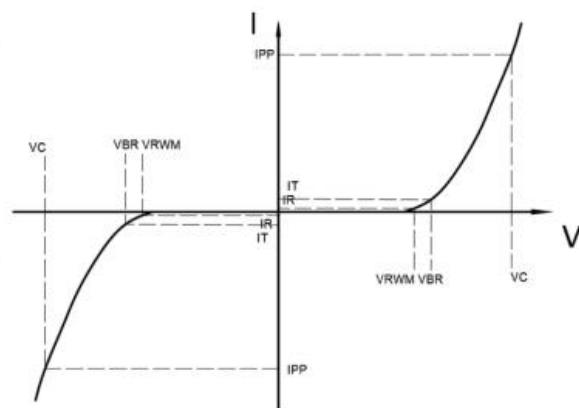
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25°C接触放电	V <sub>ESD</sub>	±15	KV
ESD (IEC61000-4-2 air discharge) @25°C 空气放电	V <sub>ESD</sub>	±15	KV
Peak Pulse Current @25°C峰值脉冲电流	I <sub>PP</sub>	3	A
Peak Pulse Power @25°C峰值脉冲功率	P <sub>PK</sub>	50	W
Lead Temperature 管脚温度	T <sub>L</sub>	260	°C
Operating Temperature 工作温度	T <sub>op</sub>	-40~85	°C
Junction Temperature 结温	T <sub>J</sub>	125	°C
Storage Temperature 储存温度	T <sub>stg</sub>	-55~150	°C

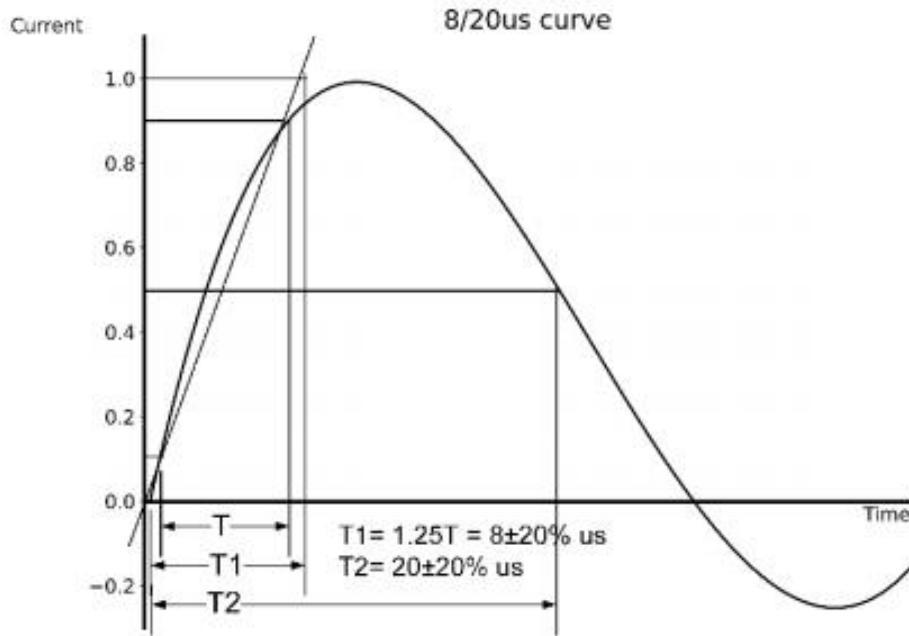
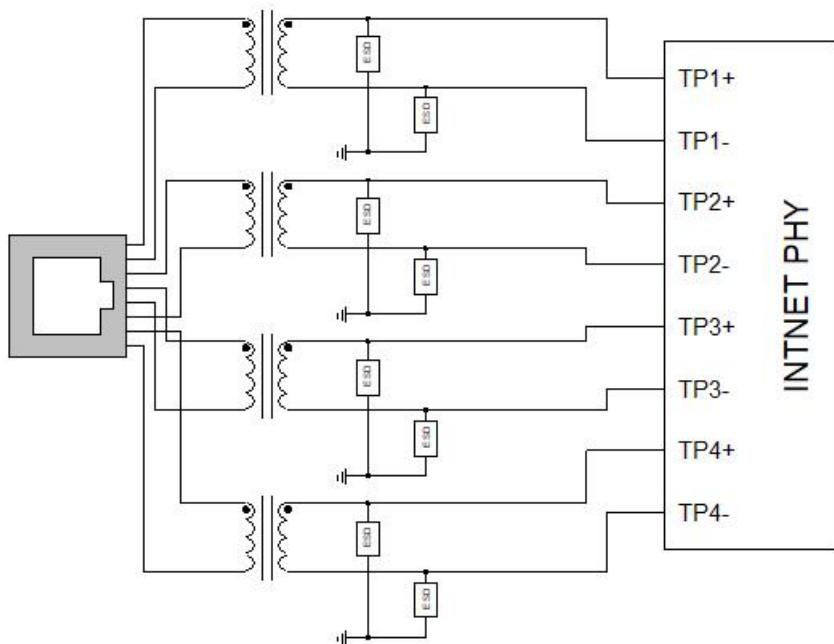
## ■ Electrical Characteristics 电特性

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

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			V	$I_T=1\text{mA}$
Reverse Leakage Current 反向漏电流	$I_R$			1	$\mu\text{A}$	$V_{RWM}=5\text{V}$
Clamping Voltage 钳位电压	$V_C$		15		V	$I_{PP}=1\text{A}, t_p=8/20\mu\text{s}$
Clamping Voltage 钳位电压	$V_C$		25		V	$I_{PP}=3\text{A}, t_p=8/20\mu\text{s}$
Diode Capacitance 二极管电容	$C_D$		0.25		pF	$V_R=0\text{V}, f=1\text{MHz}$

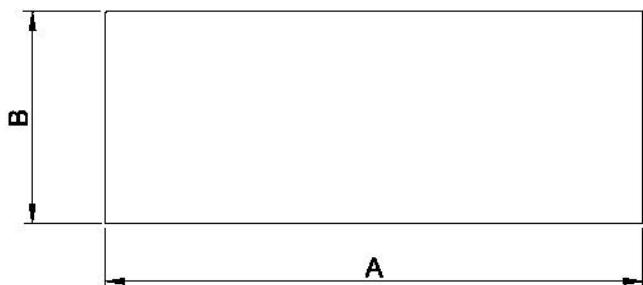
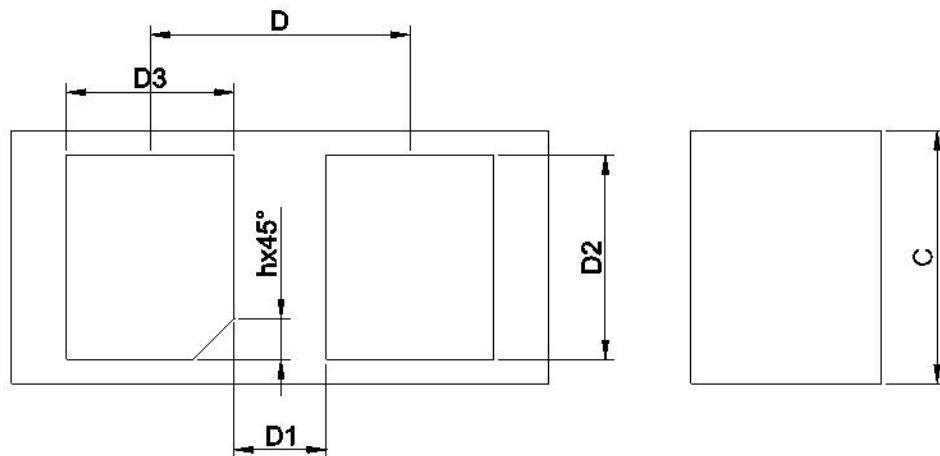
Symbol	Parameters
$V_{RWM}$	Peak Reverse Working Voltage
$I_R$	Reverse Leakage Current @ $V_{RWM}$
$V_{BR}$	Breakdown Voltage @ $I_T$
$I_T$	Test Current
$I_{PP}$	Maximum Reverse Peak Pulse Current
$V_C$	Clamping Voltage @ $I_{PP}$
$I_F$	Forward Current
$V_F$	Forward Voltage @ $I_F$



**■ Typical Characteristic Curve 典型特性曲线****■ Typical Applications 典型应用**

FSUC2X5V1BA

■ Dimension 外形封装尺寸



Units in millimeters

SYMBOL	MIN	NOM	MAX
A	0.585	0.600	0.635
B	0.270	0.300	0.310
C	0.285	0.310	0.335
D	0.340REF		
D1	0.150REF		
D2	0.210	0.230	0.250
D3	0.170	0.190	0.210