安徽富信半导体科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO. , LTD.

FSUC2F5V1B

DFN1006-2L ESD 静电保护二极管

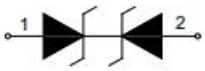
■Features 特点

Ultra-low capacitance ESD Protection 极低电容静电保护
- ±10kV 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

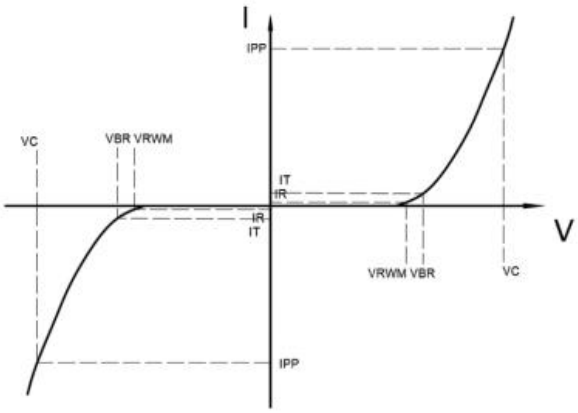
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25℃接触放电	V_{ESD}	±10	KV
ESD (IEC61000-4-2 air discharge) @25℃ 空气放电	V_{ESD}	±15	KV
Peak Pulse Current @25℃峰值脉冲电流	I_{PP}	3	A
Peak Pulse Power @25℃峰值脉冲功率	P_{PK}	75	W
Lead Temperature 管脚温度	T_L	260	℃
Operating Temperature 工作温度	T_{op}	-40~85	℃
Junction Temperature 结温	T_J	125	℃
Storage Temperature 储存温度	T_{stg}	-55~150	℃

■Electrical Characteristics 电特性

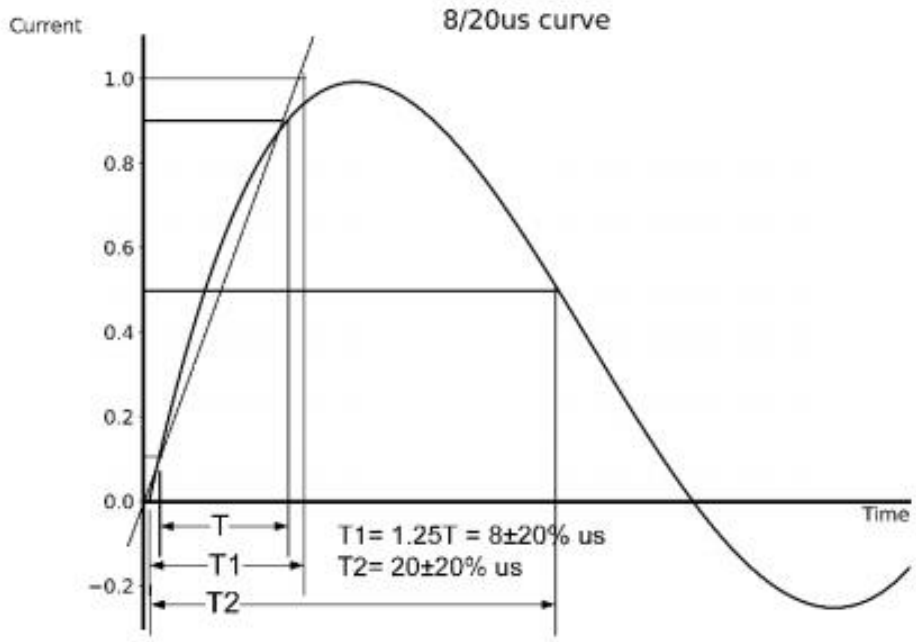
(T_A=25℃ unless otherwise noted 如无特殊说明，温度为 25℃)

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}	6			V	I_T=1mA
Reverse Leakage Current 反向漏电流	I_R			1	μA	V_{RWM}=5V
Clamping Voltage 钳位电压	V_C		15		V	I_{PP}=1A,tp=8/20μs
Clamping Voltage 钳位电压	V_C		25		V	I_{PP}=3A,tp=8/20μs
Diode Capacitance 二极管电容	C_D		0.2		pF	V_R=0V,f=1MHz

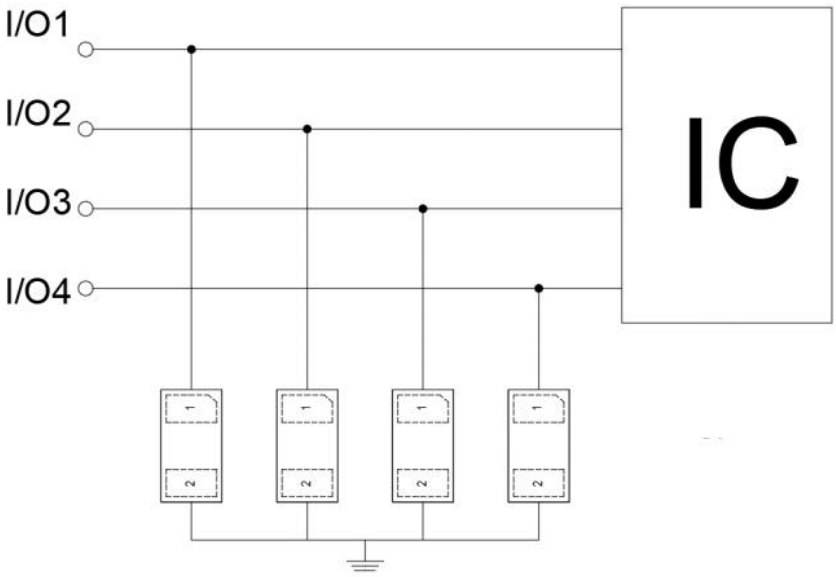
Symbol	Parameters
V_{RWM}	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
I_F	Forward Current
V_F	Forward Voltage @ I_F



■Typical Characteristic Curve 典型特性曲线



■Typical Applications 典型应用



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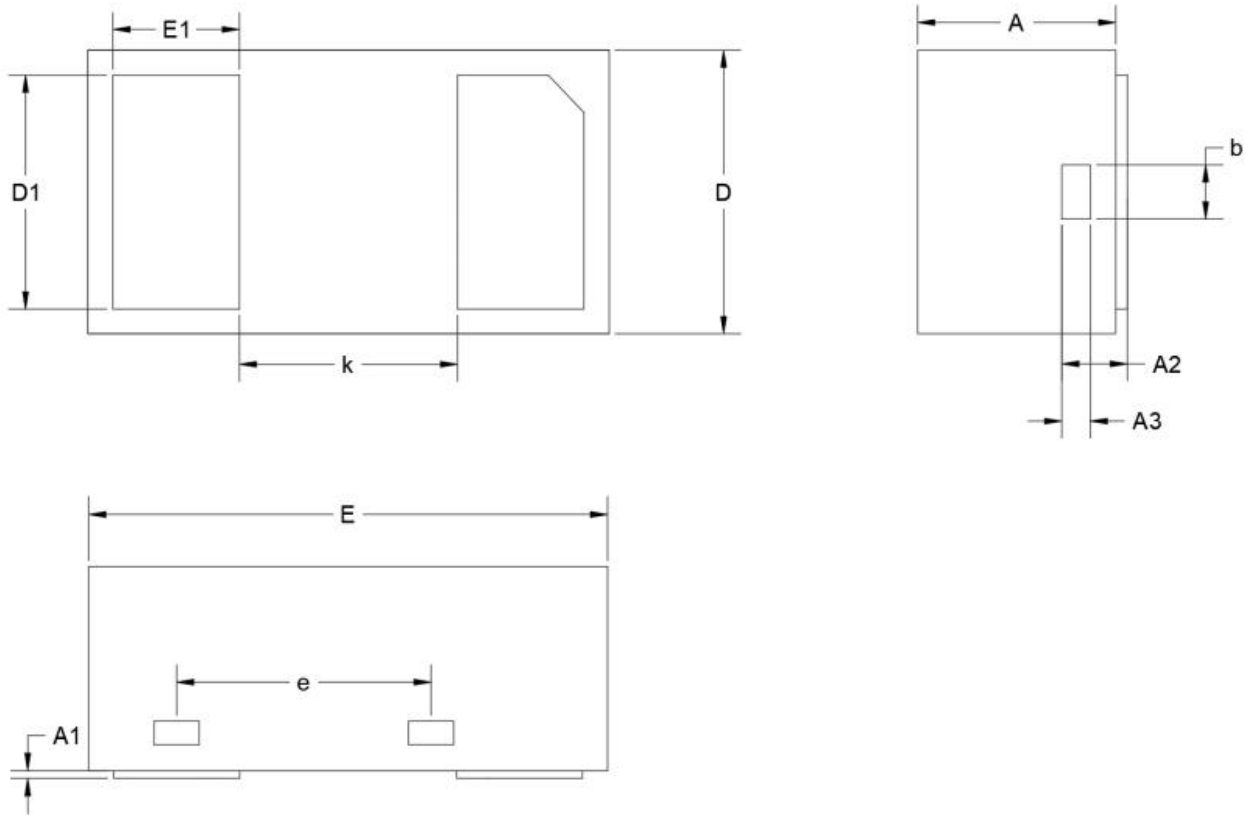
■ Dimension 外形封装尺寸



Units in millimeters

Symbol	Min.	Nom.	Max.
A	0.350	0.450	0.550
A1	0.000	0.020	0.050
A2	0.077	0.127	0.207
A3	0.013	0.063	0.113
b	0.070	0.120	0.200
D	0.500	0.600	0.700
D1	0.400	0.500	0.600
D2	0.200	0.300	0.400
E	0.900	1.000	1.100
E1	0.150	0.250	0..350
e	0.360	0.410	0.460
k	0.300	0.400	0.500