



# 安徽富信半导体科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD.

FSNC2F12V1UA

## DFN1006-2L ESD 静电保护二极管

### ■ Features 特点

IEC 61000-4-2 Level 4 ESD Protection 静电保护

- ±30kV Contact Discharge 接触放电

- ±30kV Air Discharge 空气放电

### ■ Applications 应用

MP3 Players 播放器

Digital Cameras 数码相机

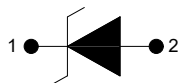
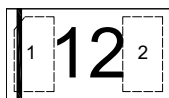
Notebooks & Handhelds 笔记本或手持机

Cellular handsets and accessories 蜂窝手机及配件

### ■ Internal Schematic Diagram 内部结构



DFN1006-2L



### ■ 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	$V_{ESD}$	±30	KV
ESD (IEC61000-4-2 air discharge) @25°C 空气放电	$V_{ESD}$	±30	KV
Peak Pulse Current @25°C峰值脉冲电流	$I_{PP}$	10	A
Peak Pulse Power @25°C峰值脉冲功率	$P_{PK}$	300	W
Lead Temperature 管脚温度	$T_L$	260	°C
Operating Temperature 工作温度	$T_{op}$	-40~85	°C
Junction Temperature 结温	$T_J$	125	°C
Storage Temperature 储存温度	$T_{stg}$	-55~150	°C

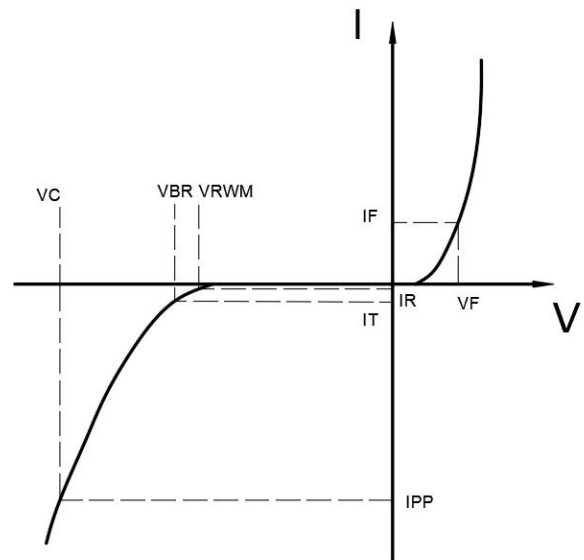


## ■ Electrical Characteristics 电特性

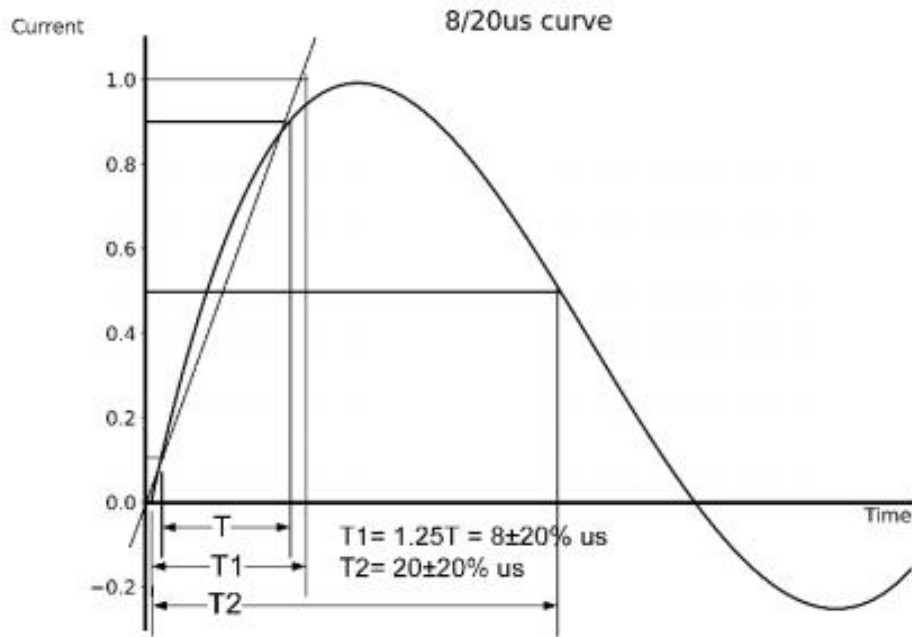
( $T_A=25^{\circ}\text{C}$  unless otherwise noted 如无特殊说明, 温度为  $25^{\circ}\text{C}$ )

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	$V_{RWM}$			12	V	
Reverse Breakdown Voltage 反向击穿电压	$V_{BR}$	13.5			V	$I_T=1\text{mA}$
Reverse Leakage Current 反向漏电流	$I_R$			1	$\mu\text{A}$	$V_{RWM}=12\text{V}$
Clamping Voltage 钳位电压	$V_C$		20		V	$I_{PP}=1\text{A}, t_p=8/20\mu\text{s}$
Clamping Voltage 钳位电压	$V_C$		25		V	$I_{PP}=10\text{A}, t_p=8/20\mu\text{s}$
Diode Capacitance 二极管电容	$C_D$		8		pF	$V_R=0\text{V}, f=1\text{MHz}$

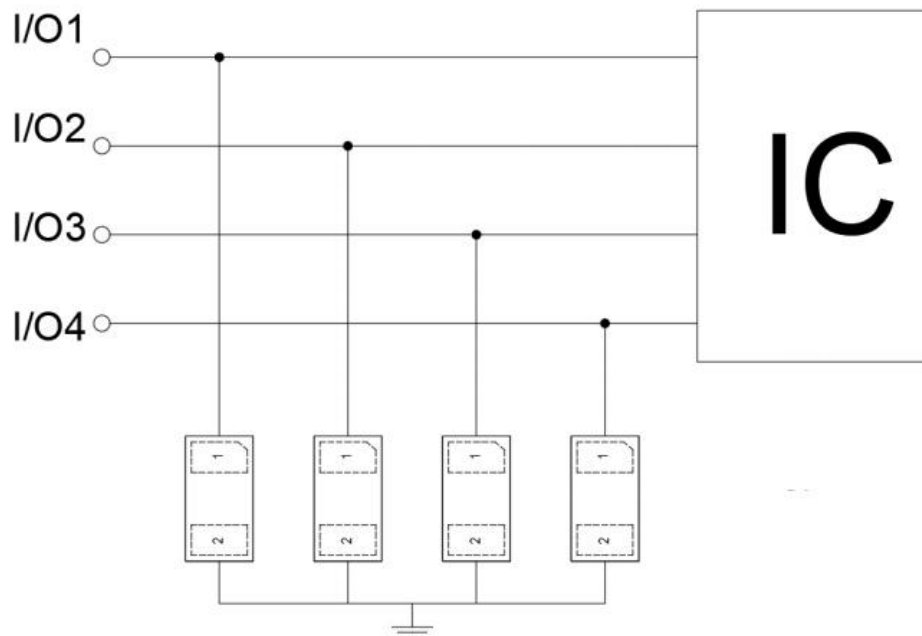
Symbol	Parameters
$V_{RWM}$	Peak Reverse Working Voltage
$I_R$	Reverse Leakage Current @ $V_{RWM}$
$V_{BR}$	Breakdown Voltage @ $I_T$
$I_T$	Test Current
$I_{PP}$	Maximum Reverse Peak Pulse Current
$V_C$	Clamping Voltage @ $I_{PP}$
$I_F$	Forward Current
$V_F$	Forward Voltage @ $I_F$



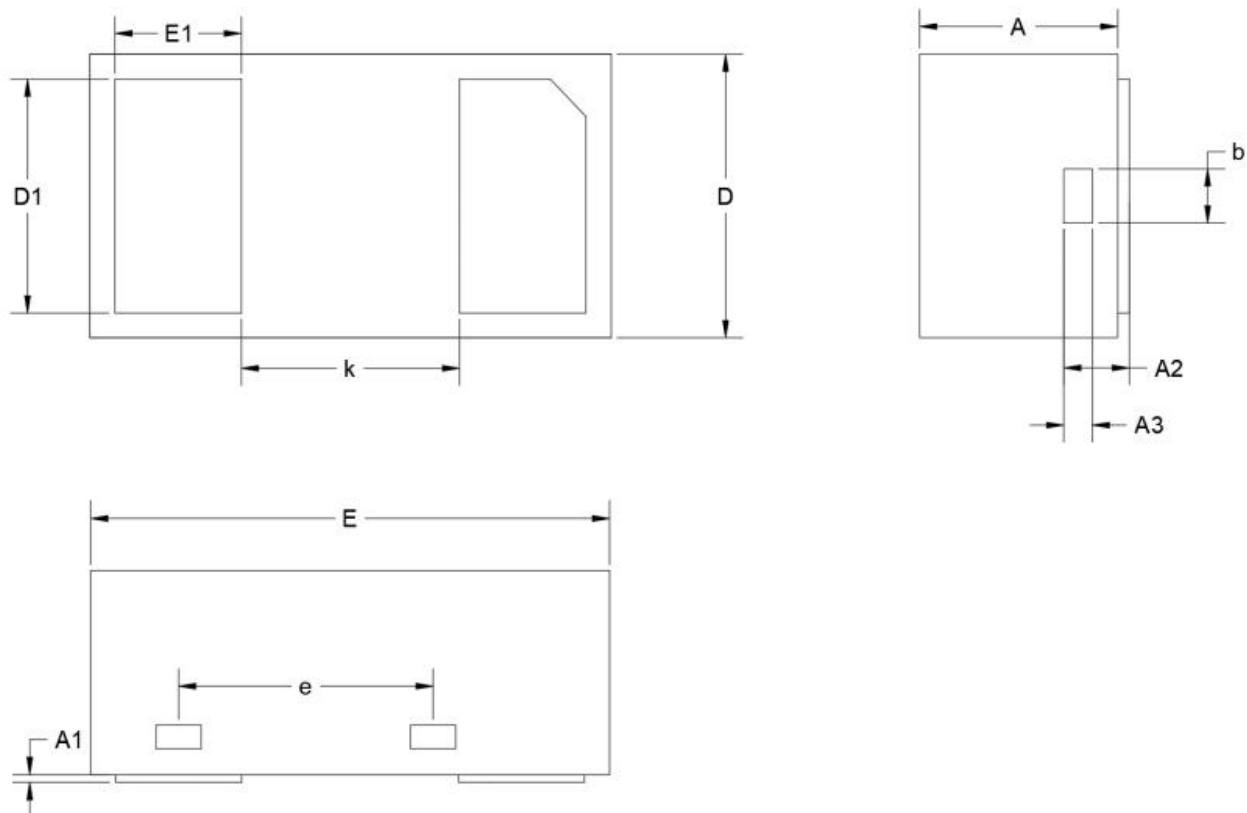
## ■ Typical Characteristic Curve 典型特性曲线



## ■ Typical Applications 典型应用



## ■ 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