



安徽富信半导体科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD.

FSNC2F5V1BA

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

- ±25kV Contact Discharge 接触放电

- ±25kV Air Discharge 空气放电

■ Applications 应用

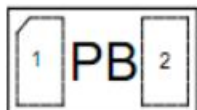
MP3 Players 播放器

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} | ±25 | KV |
| ESD (IEC61000-4-2 air discharge) @25°C 空气放电 | V_{ESD} | ±25 | KV |
| Peak Pulse Current @25°C峰值脉冲电流 | I_{PP} | 6 | A |
| Peak Pulse Power @25°C峰值脉冲功率 | P_{PK} | 60 | 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 |

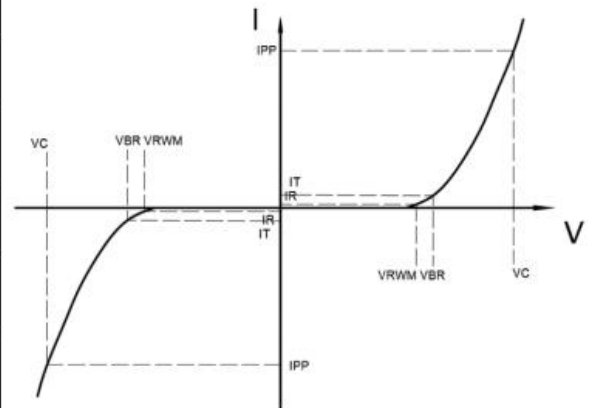


■ Electrical Characteristics 电特性

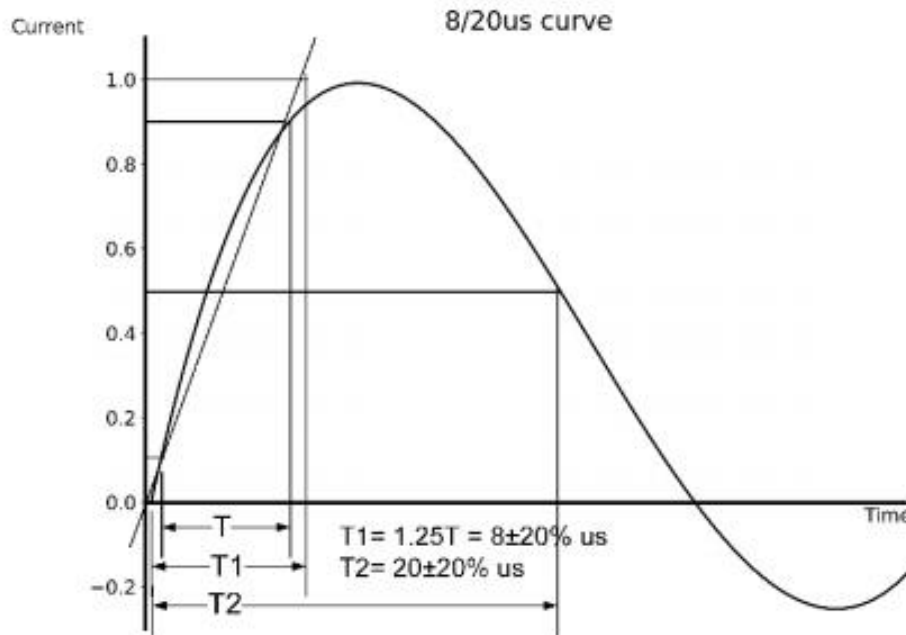
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

| 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 | μA | $V_{RWM}=5\text{V}$ |
| Clamping Voltage 钳位电压 | V_C | | 8 | | V | $I_{PP}=1\text{A}, t_p=8/20\mu\text{s}$ |
| Clamping Voltage 钳位电压 | V_C | | 10 | | V | $I_{PP}=6\text{A}, t_p=8/20\mu\text{s}$ |
| Diode Capacitance 二极管电容 | C_D | | 12 | | pF | $V_R=0\text{V}, f=1\text{MHz}$ |

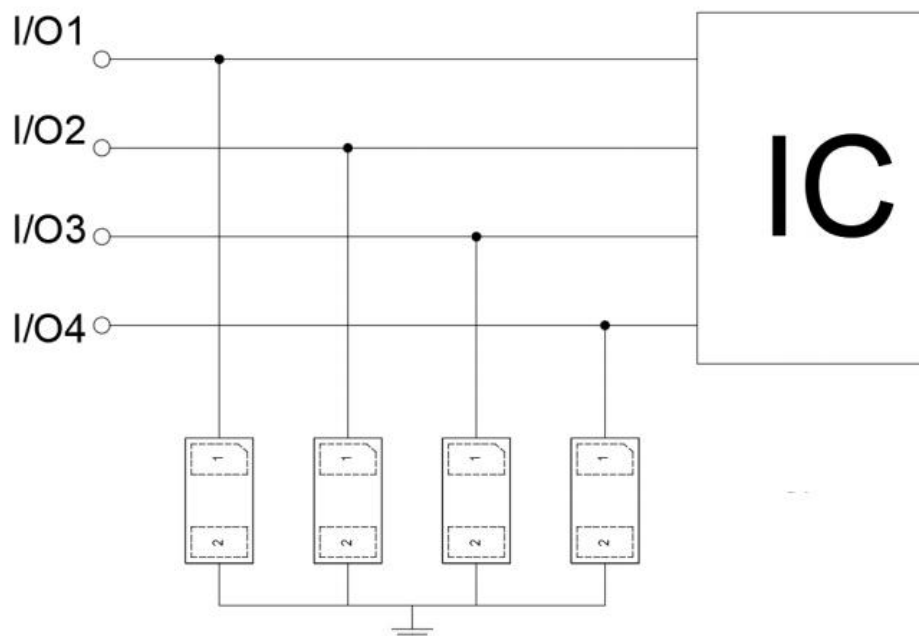
| Symbol | Parameters |
|-----------|-------------------------------------|
| V_{RWM} | Peak Reverse Working Voltage |
| I_R | Reverse Leakage Current @ V_{RWM} |
| V_{BR} | Breakdown Voltage @ I_T |
| I_T | Test Current |
| I_{PP} | Maximum Reverse Peak Pulse Current |
| V_C | Clamping Voltage @ I_{PP}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



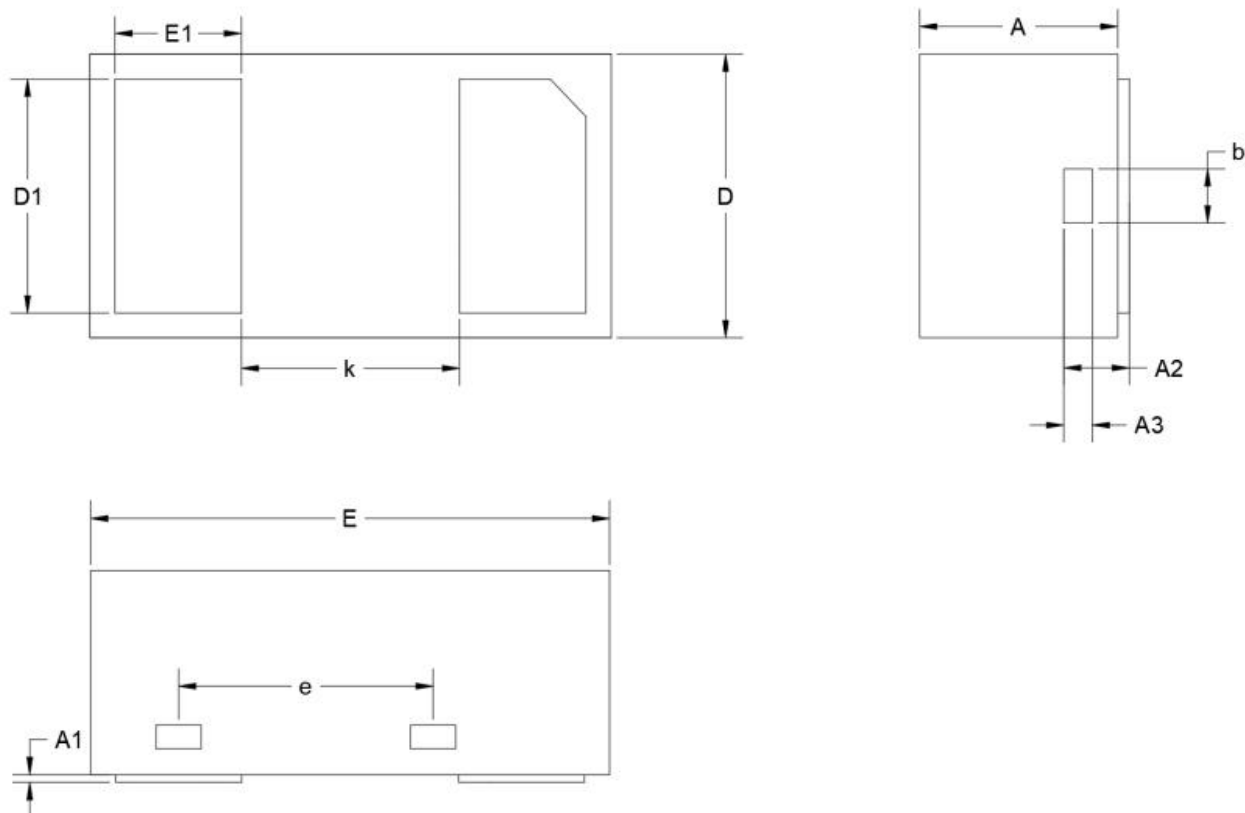
■ Typical Characteristic Curve 典型特性曲线



■ 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 |