



DFN0603-2L ESD 静电保护二极管

■ Features 特点

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

- ±10kV Contact Discharge 接触放电

- ±15kV Air Discharge 空气放电

■ Applications 应用

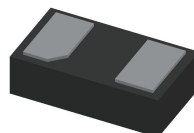
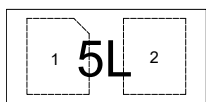
Notebooks Computer 笔记本电脑

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°C接触放电 | V_{ESD} | ±10 | KV |
| ESD (IEC61000-4-2 air discharge) @25°C 空气放电 | V_{ESD} | ±15 | KV |
| Peak Pulse Current @25°C峰值脉冲电流 | I_{PP} | 4 | A |
| Peak Pulse Power @25°C峰值脉冲功率 | P_{PK} | 80 | 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 |

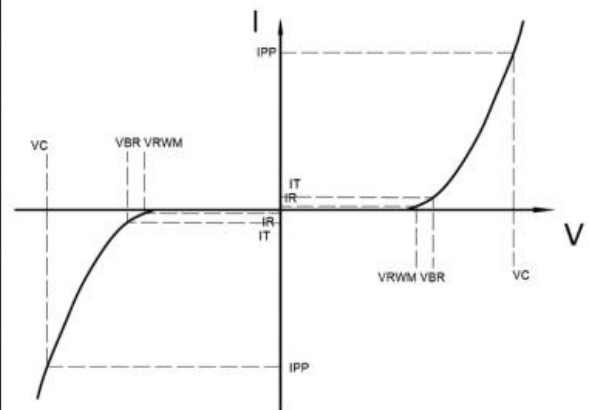


■ Electrical Characteristics 电特性

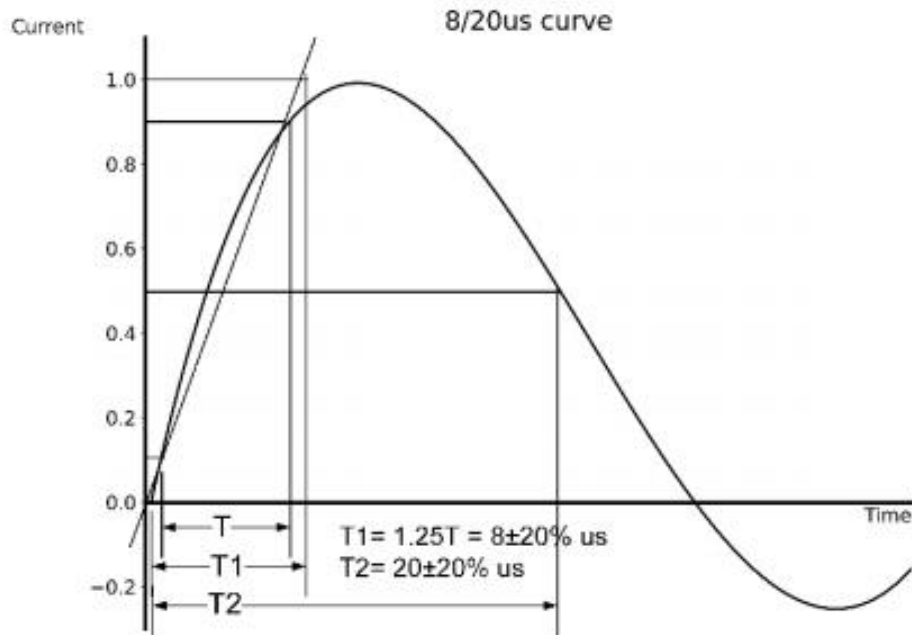
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

| 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 | | 12 | | V | $I_{PP}=1\text{A}, t_p=8/20\mu\text{s}$ |
| Clamping Voltage 钳位电压 | V_C | | 18 | | V | $I_{PP}=4\text{A}, t_p=8/20\mu\text{s}$ |
| Diode Capacitance 二极管电容 | C_D | | 0.35 | | pF | $V_R=0\text{V}, f=1\text{MHz}$ |

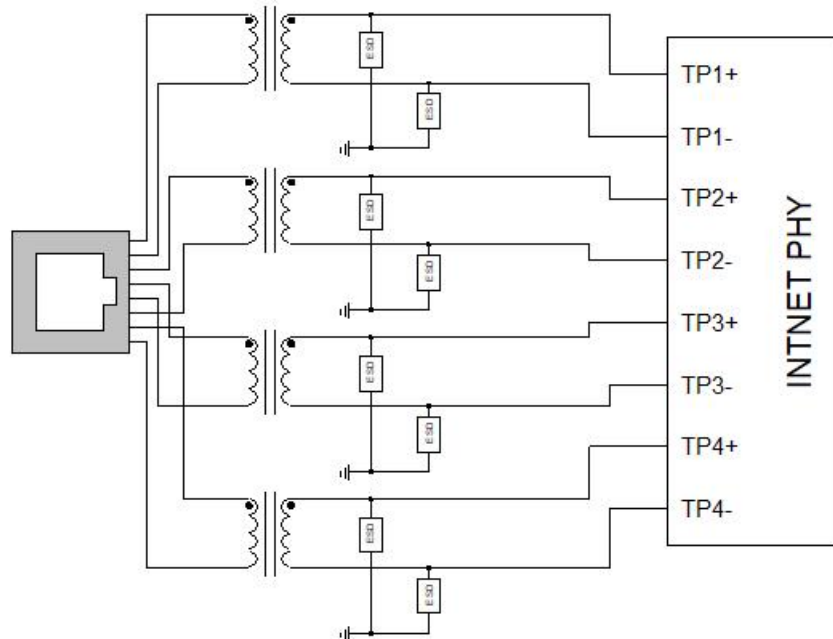
| Symbol | Parameters |
|-----------|-------------------------------------|
| V_{RWM} | Peak Reverse Working Voltage |
| I_R | Reverse Leakage Current @ V_{RWM} |
| V_{BR} | Breakdown Voltage @ I_T |
| I_T | Test Current |
| I_{PP} | Maximum Reverse Peak Pulse Current |
| V_C | Clamping Voltage @ I_{PP}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



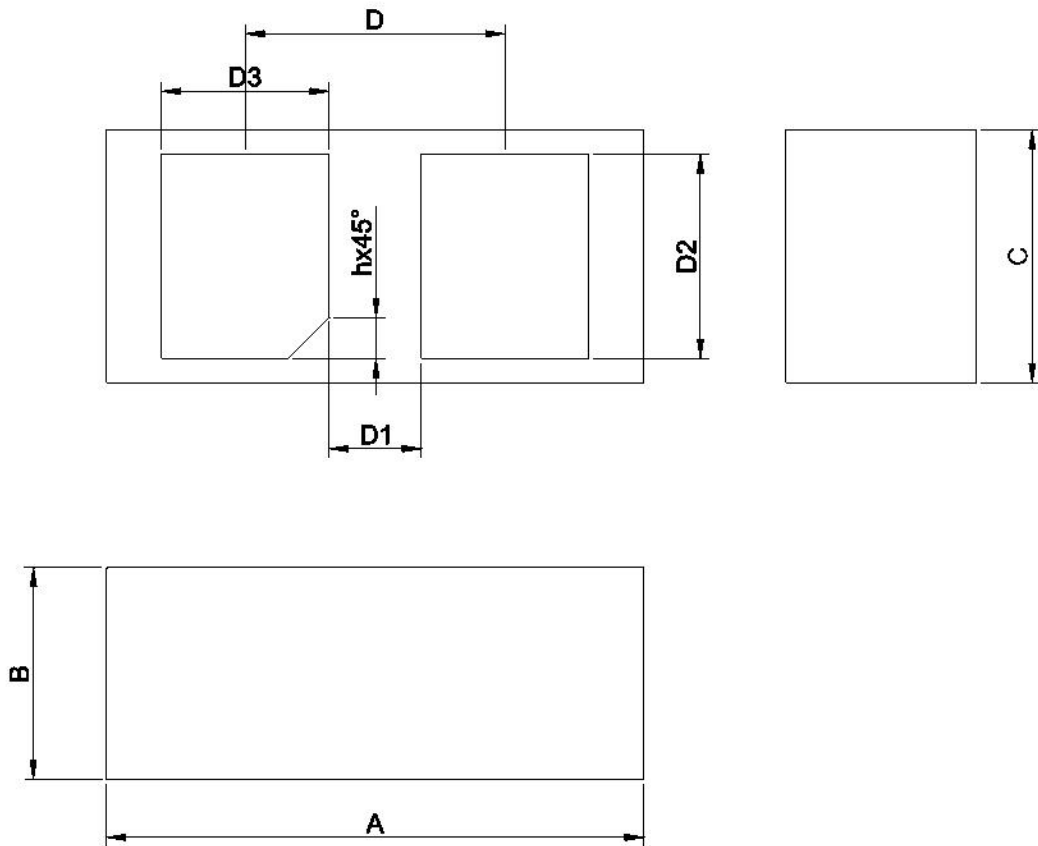
■ Typical Characteristic Curve 典型特性曲线



■ Typical Applications 典型应用



Dimension 外形封装尺寸



Units in millimeters

| SYMBOL | MIN | NOM | MAX |
|--------|----------|-------|-------|
| A | 0.585 | 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 |