ESDN0501D0

DFN0603-2L ESD 静电保护二极管

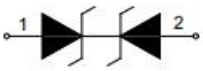
■Features 特点

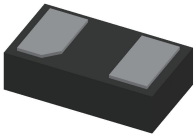
IEC 61000-4-2 Level 4 ESD Protection 静电保护
- ±25kV Contact Discharge 接触放电
- ±25kV Air Discharge 空气放电

■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 蜂窝手机及附件

■Internal Schematic Diagram 内部结构





■Absolute Maximum Ratings 最大额定值

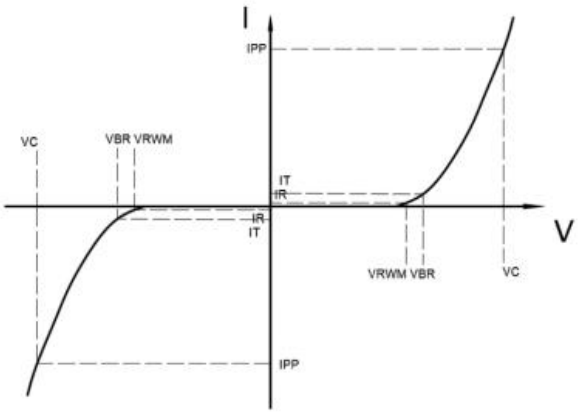
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25℃接触放电	V_{ESD}	±25	KV
ESD (IEC61000-4-2 air discharge) @25℃ 空气放电	V_{ESD}	±25	KV
Peak Pulse Current @25℃峰值脉冲电流	I_{PP}	8	A
Peak Pulse Power @25℃峰值脉冲功率	P_{PK}	88	W
Lead Temperature 管脚温度	T_L	260	℃
Operating Temperature 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}	5.6		8.4	V	I_T=1mA
Reverse Leakage Current 反向漏电流	I_R			0.1	μA	V_{RWM}=5V
Clamping Voltage 钳位电压	V_C			6	V	I_{PP}=1A,tp=8/20μs
Clamping Voltage 钳位电压	V_C			11	V	I_{PP}=8A,tp=8/20μs
Junction Capacitance 结电容	C_J		10		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

FIG1：Power rating derating curve

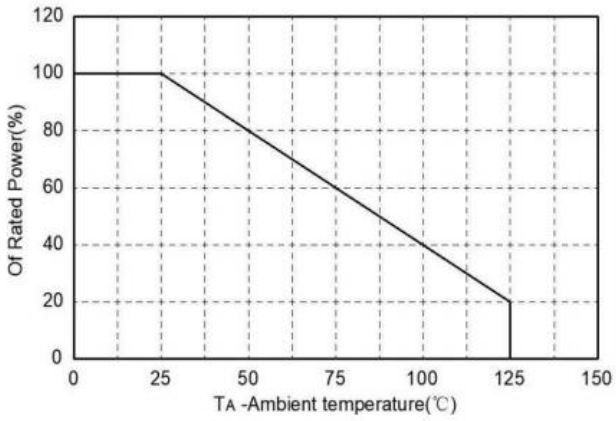


FIG2： pulse Waveform

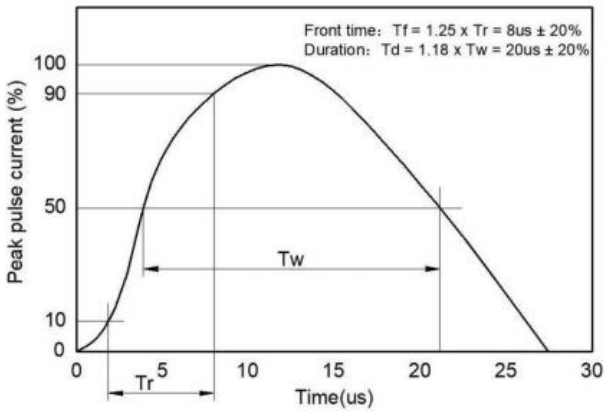


FIG3：Capacitance between terminals characteristics

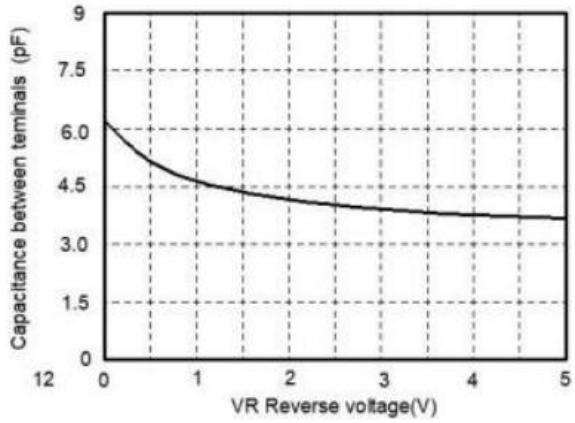
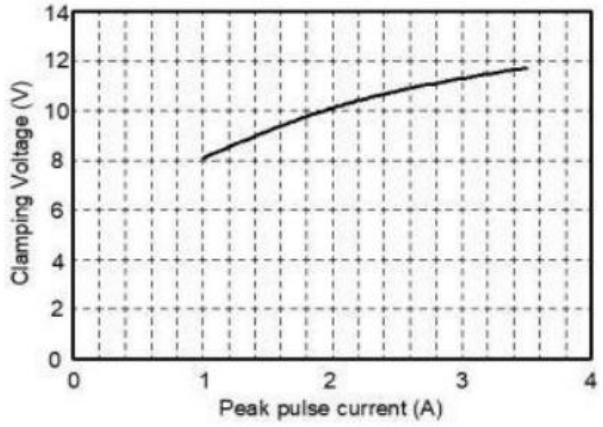
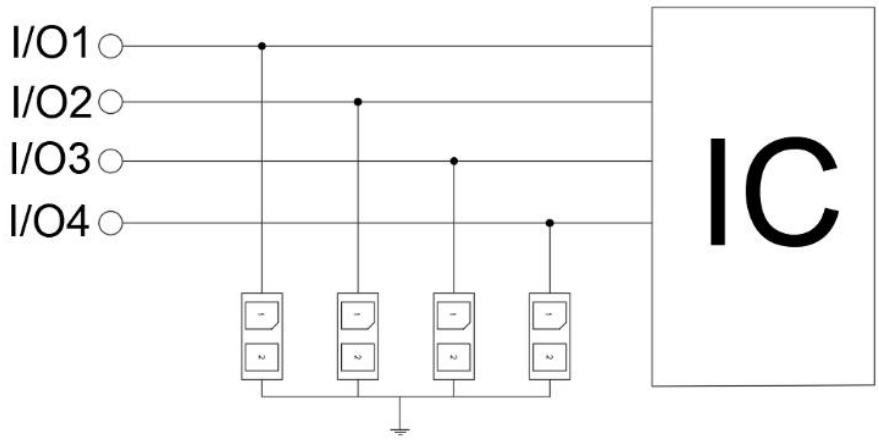


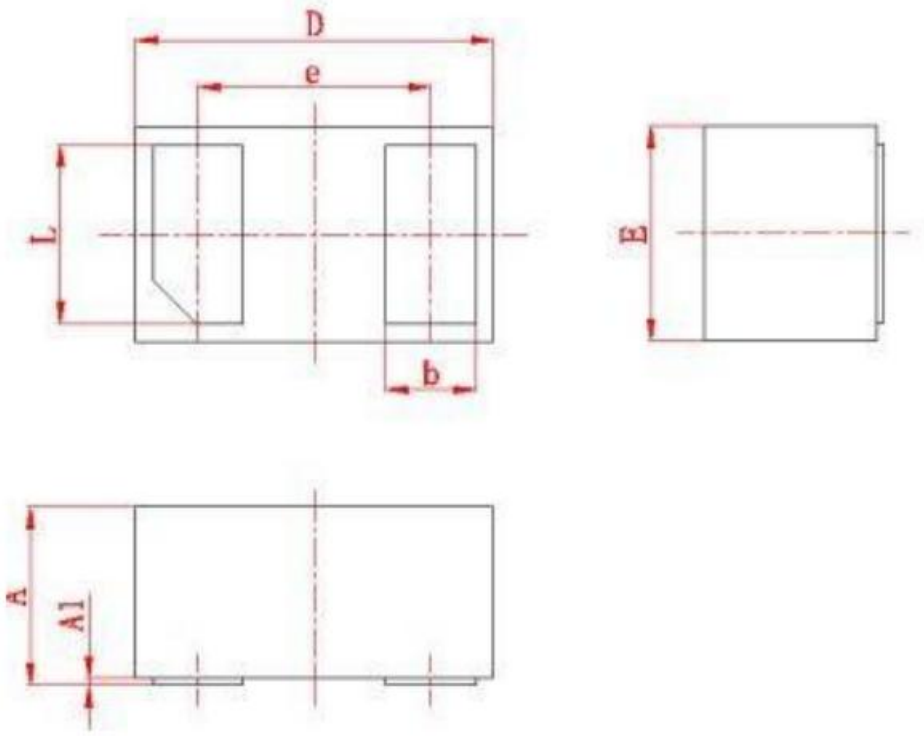
FIG4: Clamping Voltage vs. Peak Pulse Current



■Typical Applications 典型应用



■ Dimension 外形封装尺寸



Symbol	Dimension in Millimeters	
	min	max
A	0.27	0.37
A1	0	0.05
D	0.55	0.65
E	0.25	0.36
e	(0.4)	
b	0.09	0.2
L	0.17	0.25