



DFN1610-2L ESD 静电保护二极管

■ Features 特点

Bi-directional ESD Protection 单通道双向静电保护

■ Applications 应用

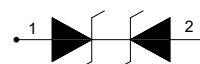
Notebooks, desktops, and servers 笔记本、台式机和服务服务器

Cellular handsets and accessories 蜂窝手机及配件

Personal Digital Assistants 个人数码助手

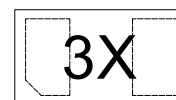
Portable Instrumentation 桌面仪器

Cordless phones 子母电话



■ Internal Schematic Diagram 内部结构

■ Device Marking 产品打标



■ 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 Power @25°C峰值脉冲功率	P_{PK}	1350	W
Peak Pulse Current @25°C峰值脉冲电流	I_{PP}	100	A
Lead Temperature 管脚温度	T_L	260	°C
Lead Solder Time 管脚焊接时间	T_L	10	S
Operating Temperature 工作温度	T_{op}	-40~85	°C
Junction Temperature 结温	T_J	-55~125	°C
Storage Temperature 储存温度	T_{stg}	-55~150	°C

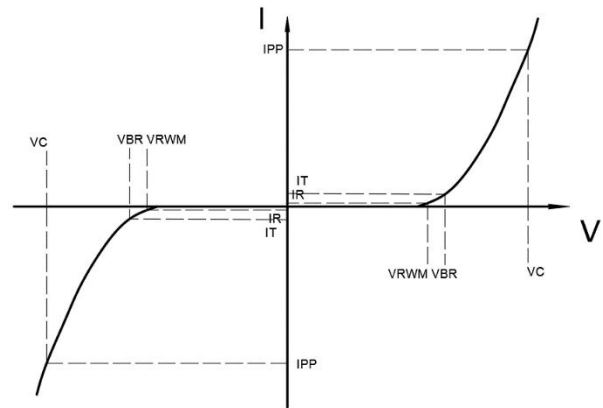


■ Electrical Characteristics 电特性

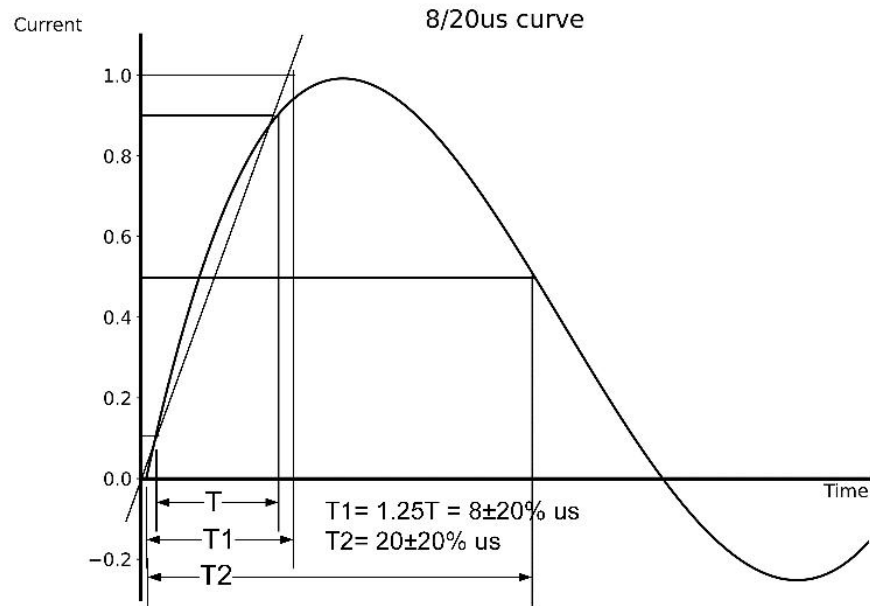
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

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}	5.5			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		7.5		V	$I_{PP}=1\text{A}, t_p=8/20\mu\text{s}$
Clamping Voltage 钳位电压	V_C		13.5		V	$I_{PP}=100\text{A}, t_p=8/20\mu\text{s}$
Diode Capacitance 二极管电容	C_D		300		pF	$V_R=0\text{V}, f=1\text{MHz}$

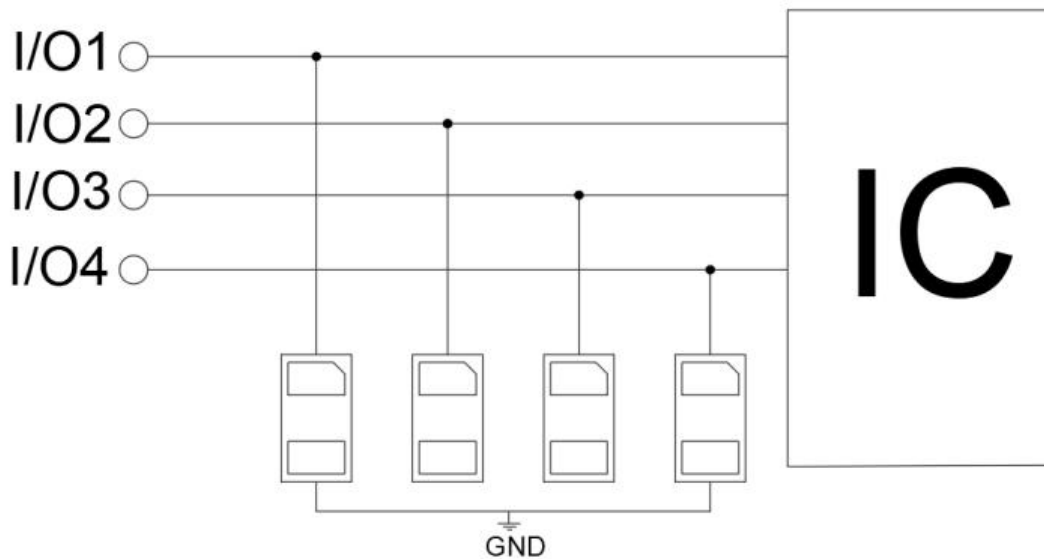
V_{RWM}	Reverse Working Voltage 反向工作电压
$V_{R(BR)}$	Reverse Breakdown Voltage 反向击穿电压@ $I_T=1\text{mA}$
I_T	Test Current 测试电流
I_R	Reverse Leakage Current 反向漏电流@ V_{RWM}
V_C	Clamping Voltage 钳位电压
I_{PP}	Reverse Peak Pulse Current 浪涌电流
C_D	Diode Capacitance 二极管电容 $V_{I0}=0\text{V}, f = 1\text{MHz}$



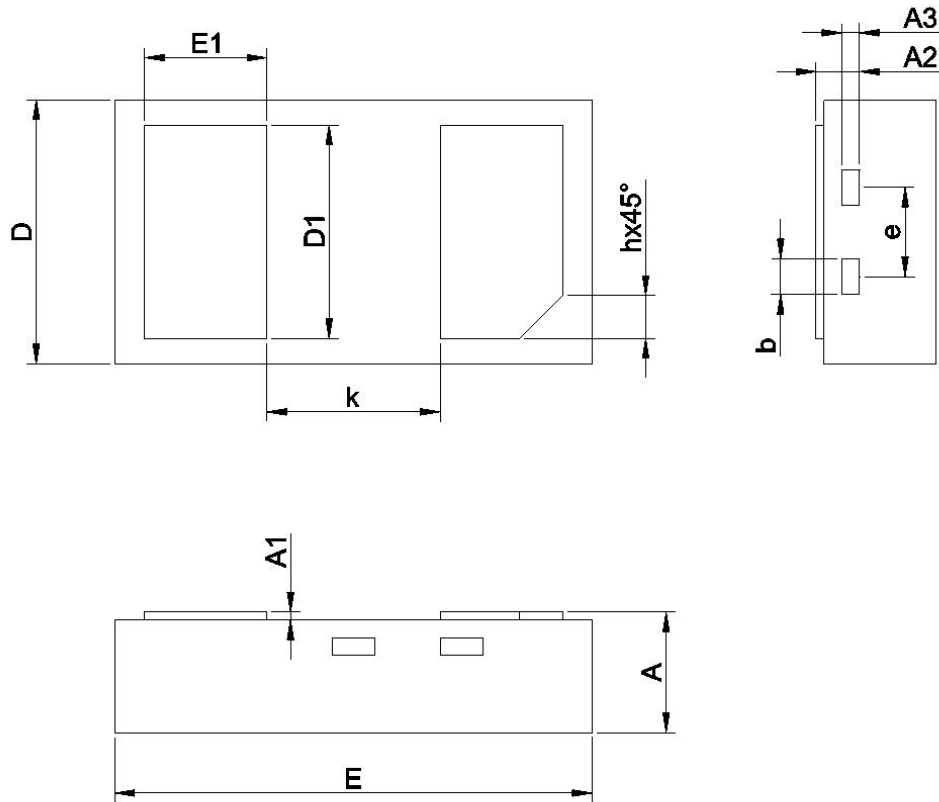
■ Typical Characteristic Curve 典型特性曲线



■ Typical Application 典型应用



Dimension 外形封装尺寸



SYMBOL	MIN	NOM	MAX
A	0.400	0.450	0.500
A1	0.000	0.020	0.050
A2	0.077	0.127	0.177
A3	0.0635 BSC		
b	0.100	0.150	0.200
D	0.950	1.000	1.050
D1	0.750	0.800	0.850
E	1.550	1.600	1.650
E1	0.350	0.400	0.450
e	0.400	0.450	0.500
h	0.150	0.200	0.250
k	0.650	0.700	/

Units: Millimeters