DFN1006-2L ESD 静电保护二极管

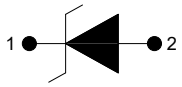
■Features 特点

IEC 61000-4-2 Level 4 ESD Protection 静电保护
- ±8kV Contact Discharge 接触放电
- ±15kV Air Discharge 空气放电

■Applications 应用

Personal Digital Assistants (PDA's)个人数码助手
Microprocessor based equipment 微处理设备
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



DFN1006-2L

■Absolute Maximum Ratings 最大额定值

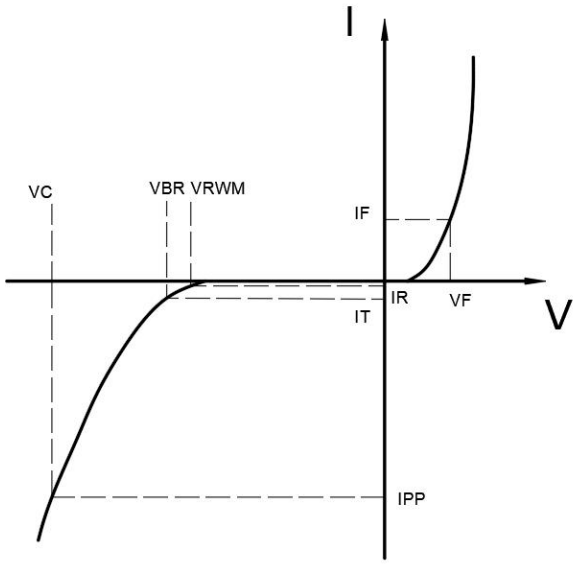
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25℃接触放电	V_{ESD}	±8	KV
ESD (IEC61000-4-2 air discharge) @25℃ 空气放电	V_{ESD}	±15	KV
Peak Pulse Current @25℃峰值脉冲电流	I_{PP}	4	A
Peak Pulse Power @25℃峰值脉冲功率	P_{PK}	270	W
Lead Temperature 管脚温度	T_L	260	℃
Operating Temperature 工作温度	T_{op}	-40~125	℃
Junction Temperature 结温	T_J	150	℃
Storage Temperature 储存温度	T_{stg}	-55~150	℃

■Electrical Characteristics 电特性

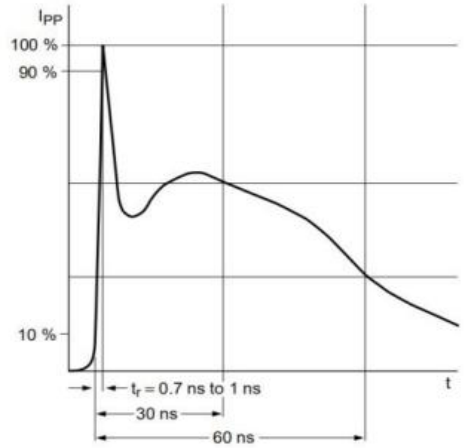
(T_A=25℃ unless otherwise noted 如无特殊说明，温度为 25℃)

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}			36	V	
Reverse Breakdown Voltage 反向击穿电压	V_{BR}	38		44	V	I_T=1mA
Reverse Leakage Current 反向漏电流	I_R			0.1	μA	V_{RWM}=36V
Clamping Voltage 钳位电压	V_C		50		V	I_{PP}=1A,tp=8/20μs
Clamping Voltage 钳位电压	V_C		65	68	V	I_{PP}=4A,tp=8/20μs
Junction Capacitance 结电容	C_J		12 3.2	15 5	pF	V_R=0V,f=1MHz V_R=36V,f=1MHz

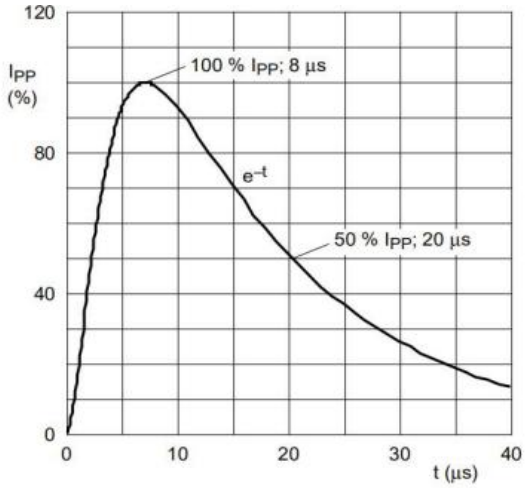
Symbol	Parameters
V_{RWM}	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
I_F	Forward Current
V_F	Forward Voltage @ I_F



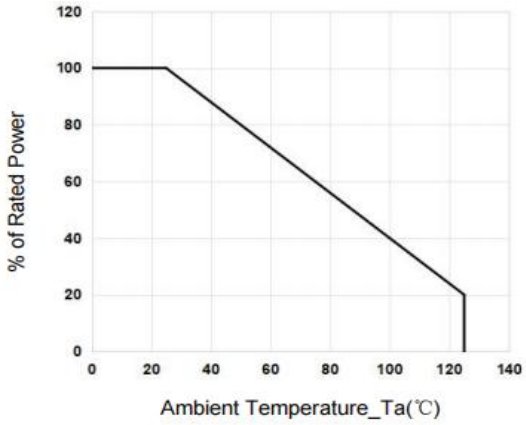
■Typical Characteristic Curve 典型特性曲线



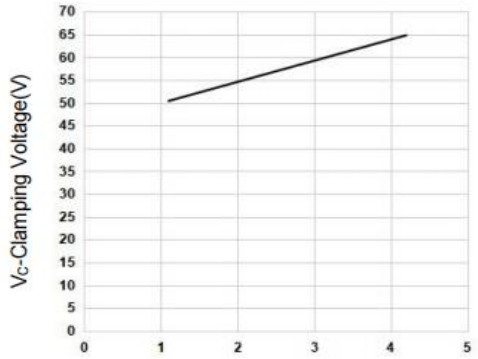
IEC61000-4-2 Waveform



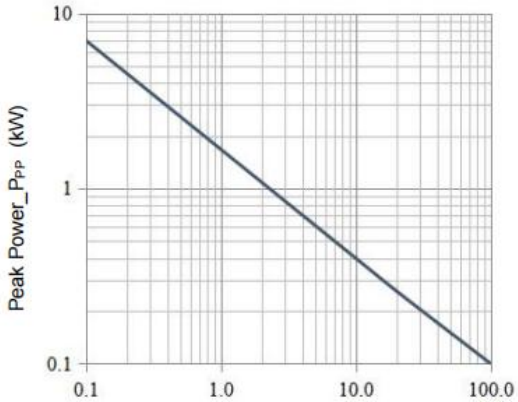
IEC 61000-4-5 Waveform(8/20µs pulse)



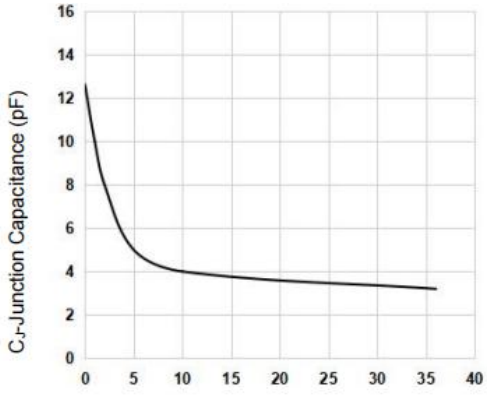
Power Derating Curve



Clamping Voltage vs. Peak Pulse Current

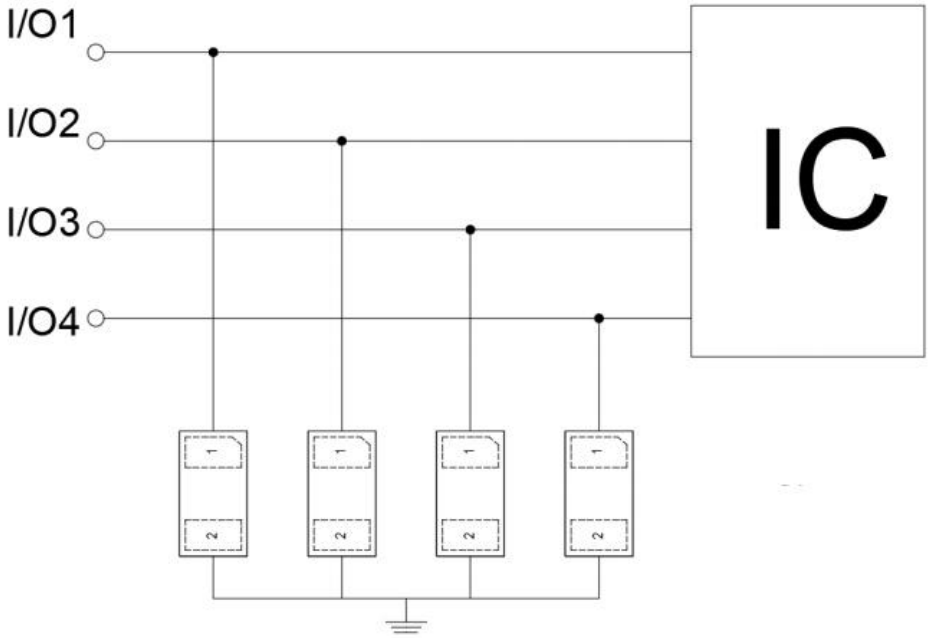


Peak Pulse Power vs. Pulse Time



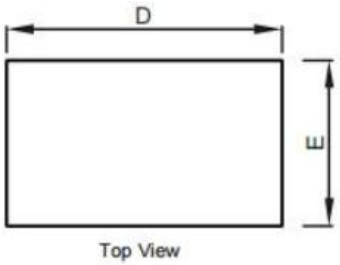
Junction Capacitance vs. Reverse Voltage

■Typical Applications 典型应用

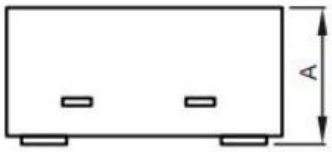


■ Dimension 外形封装尺寸

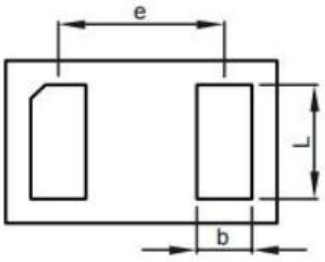
SYMBOL	MILLIMETERS		
	MIN	TYP	MAX
A	0.440	0.475	0.500
D	0.950	1.000	1.050
E	0.550	0.600	0.650
b	0.200	0.250	0.300
L	0.450	0.500	0.550
e	0.650BSC		



Top View



Side View



Bottom View