

DFN1006-2L ESD 静电保护二极管

■Features 特点

Low Capacitance ESD Protection 低电容静电保护

- $\pm 20\text{kV}$ Contact Discharge 接触放电

- $\pm 20\text{kV}$ Air Discharge 空气放电

■Applications 应用

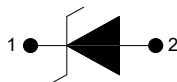
MP3 Players 播放器

Notebooks & Handhelds 笔记本或手持机

Digital Cameras/Assistants 数码相机/助手

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

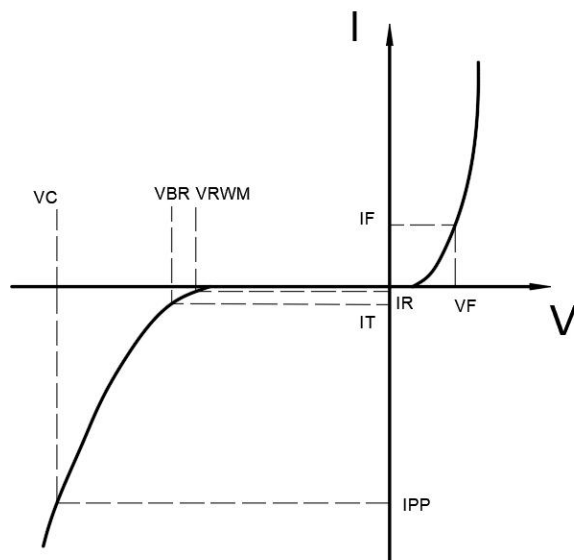
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25°C接触放电	V_{ESD}	± 20	KV
ESD (IEC61000-4-2 air discharge) @25°C 空气放电	V_{ESD}	± 20	KV
Peak Pulse Current @25°C峰值脉冲电流	I_{PP}	4	A
Peak Pulse Power @25°C峰值脉冲功率	P_{PK}	60	W
Lead Temperature 管脚温度	T_{L}	260	°C
Operating Temperature 工作温度	T_{op}	-40~125	°C
Junction Temperature 结温	T_{J}	150	°C
Storage Temperature 储存温度	T_{stg}	-55~150	°C

■ Electrical Characteristics 电特性

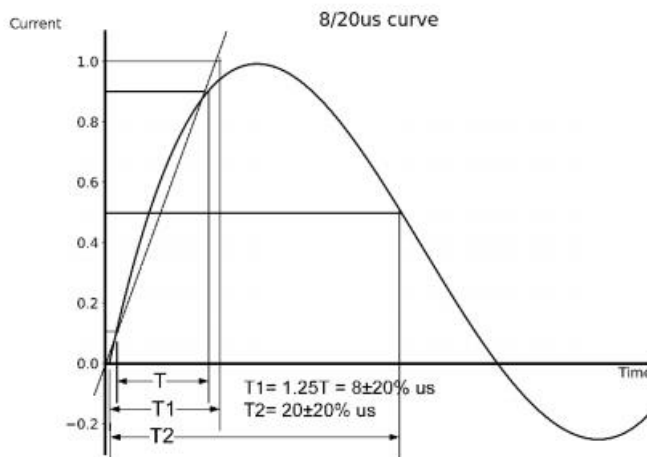
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

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	$I_{\text{T}}=1\text{mA}$
Reverse Leakage Current 反向漏电流	I_{R}			1	μA	$V_{\text{RWM}}=5\text{V}$
Clamping Voltage 钳位电压	V_{C}		8	9.5	V	$I_{\text{PP}}=1\text{A}, t_{\text{p}}=8/20\mu\text{s}$
Clamping Voltage 钳位电压	V_{C}		10.5	13	V	$I_{\text{PP}}=4\text{A}, t_{\text{p}}=8/20\mu\text{s}$
Junction Capacitance 结电容	C_{J}		0.5		pF	$V_{\text{R}}=0\text{V}, f=1\text{MHz}$

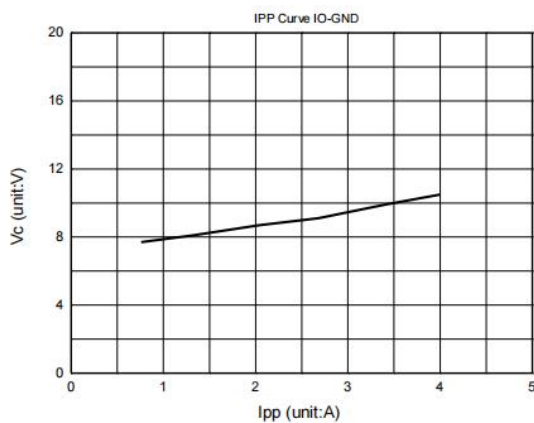
Symbol	Parameters
V_{RWM}	Peak Reverse Working Voltage
I_{R}	Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_{T}
I_{T}	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_{C}	Clamping Voltage @ I_{PP}
I_{F}	Forward Current
V_{F}	Forward Voltage @ I_{F}



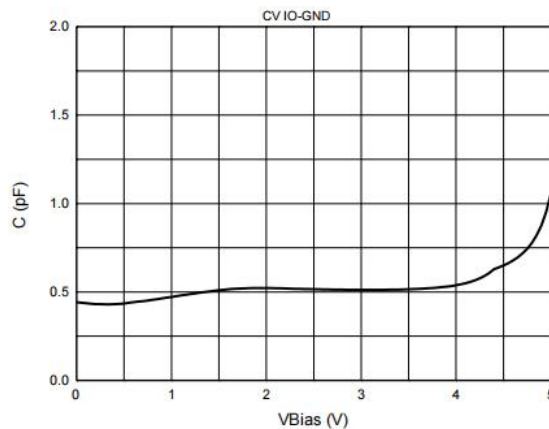
■ Typical Characteristic Curve 典型特性曲线



8 X 20us Pulse Waveform

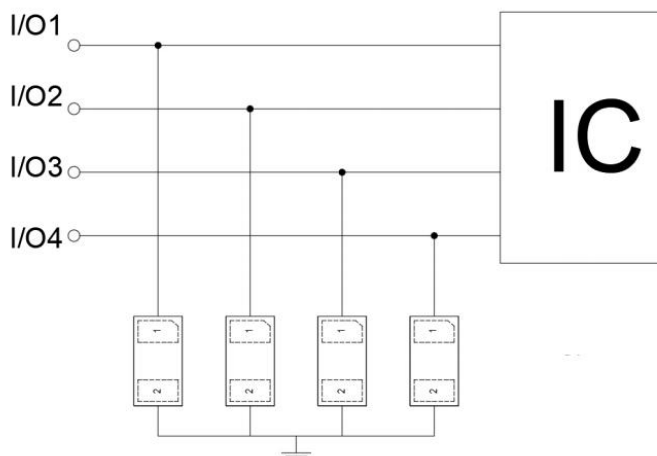


Clamping Voltage vs. Peak Pulse Current



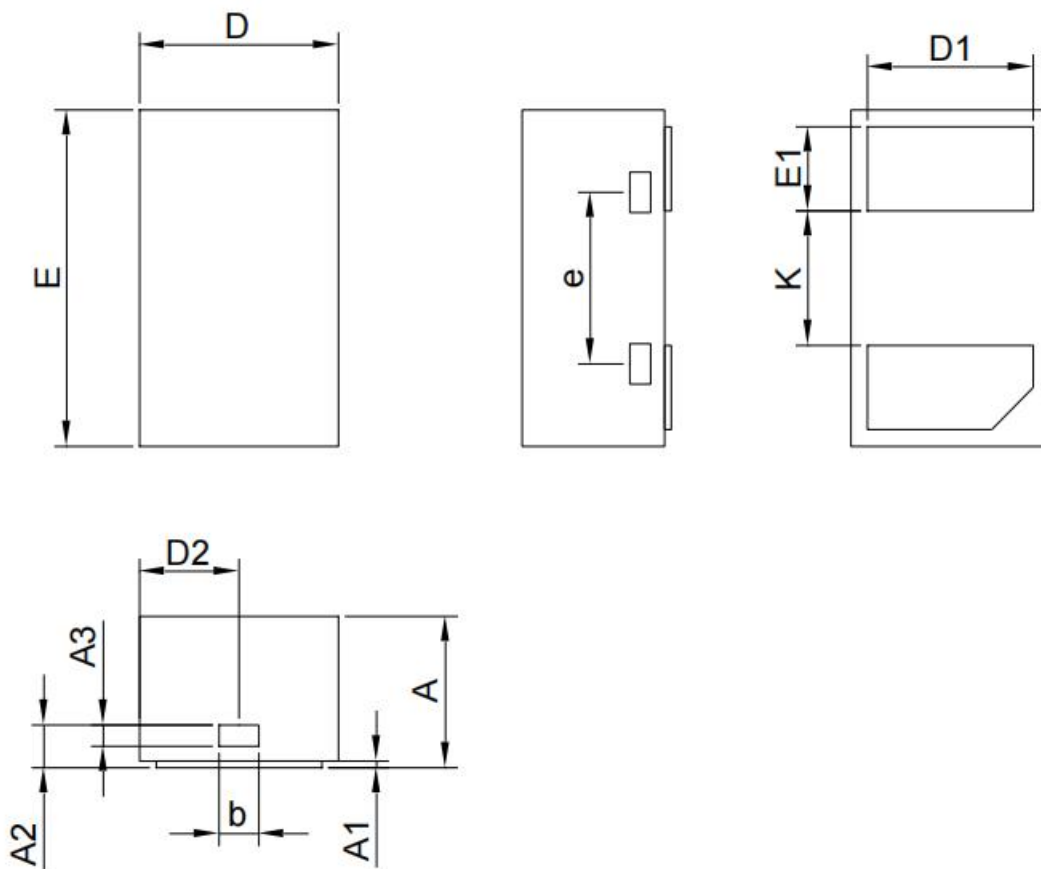
Junction Capacitance vs. Reverse Voltage

■ Typical Applications 典型应用



■ **Dimension** 外形封装尺寸

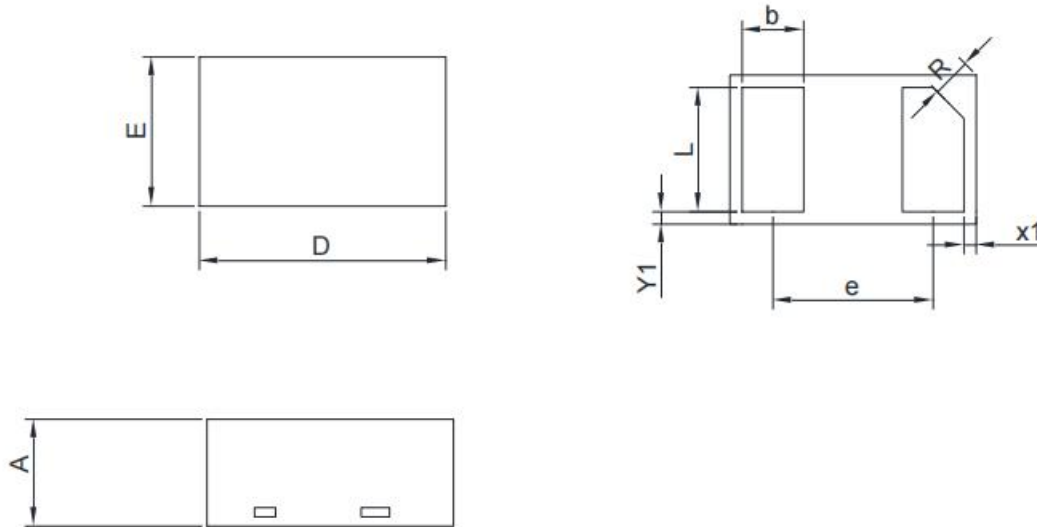
POD A(Q)



Units in millimeters

Symbol	Min.	Nom.	Max.	Symbol	Min.	Nom.	Max.
A	0.350	0.450	0.550	D1	0.400	0.500	0.600
A1	0.000	0.020	0.050	D2	0.200	0.300	0.400
A2	0.077	0.127	0.207	E	0.900	1.000	1.100
A3	0.013	0.063	0.113	E1	0.150	0.250	0.350
b	0.070	0.120	0.200	e	0.360	0.410	0.460
D	0.500	0.600	0.700	k	0.300	0.400	0.500

POD B(A)



Units in millimeters

Symbol	Min.	Nom.	Max.	Symbol	Min.	Nom.	Max.
A	0.45	0.50	0.55	R	0.07	0.10	0.13
D	0.95	1.00	1.05	X1	0.025		0.065
E	0.55	0.60	0.65	Y1	0.025		0.065
b	0.20	0.25	0.30				
L	0.45	0.50	0.55				
e	0.675						