SELC2F5V1BT

DFN1006-2L ESD 静电保护二极管

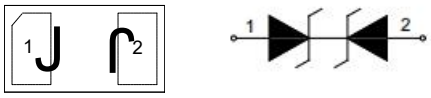
■Features 特点

Low Capacitance ESD Protection 低电容静电保护
- ±20kV Contact Discharge 接触放电
- ±20kV Air Discharge 空气放电

■Applications 应用

Notebooks & Handhelds 笔记本或手持机
Portable Digital Assistants 便携式数码助手
Cellular handsets and accessories 蜂窝手机及附件
Monitors and flat panel display 监视器和平板显示器

■Internal Schematic Diagram 内部结构



DFN1006-2L

■Absolute Maximum Ratings 最大额定值

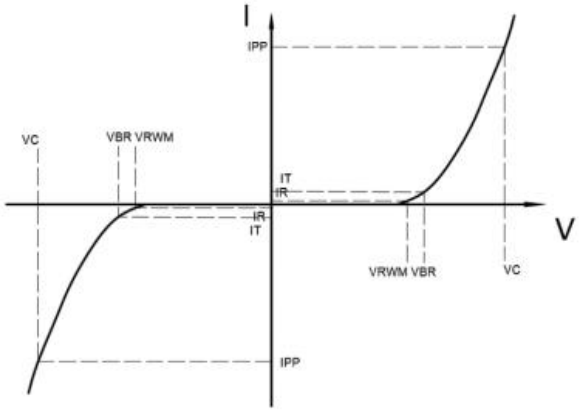
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25℃接触放电	V_{ESD}	±20	KV
ESD (IEC61000-4-2 air discharge) @25℃ 空气放电	V_{ESD}	±20	KV
Peak Pulse Current @25℃峰值脉冲电流	I_{PP}	4.5	A
Peak Pulse Power @25℃峰值脉冲功率	P_{PK}	120	W
Lead Temperature 管脚温度	T_L	260	℃
Operating Temperature 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}			5	V	
Reverse Breakdown Voltage 反向击穿电压	V_{BR}	6.5		9	V	I_T=1mA
Reverse Leakage Current 反向漏电流	I_R			1	μA	V_{RWM}=5V
Clamping Voltage 钳位电压	V_C		12	15	V	I_{PP}=1A, tp=8/20μs
Clamping Voltage 钳位电压	V_C		16	19	V	I_{PP}=3A, tp=8/20μs
Clamping Voltage 钳位电压	V_C		22	25	V	I_{PP}=4.5A, tp=8/20μs
Junction Capacitance 结电容	C_J		0.25	0.32	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

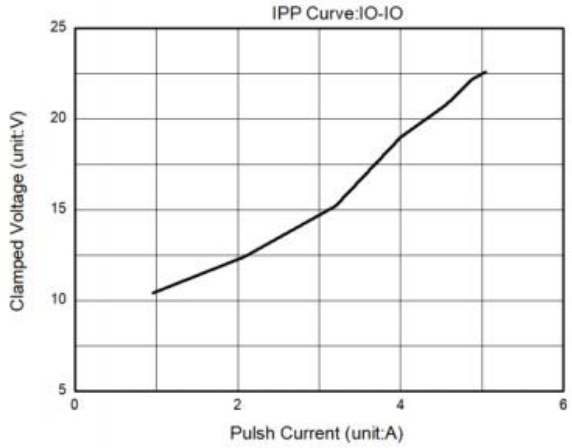


Figure 1: Clamping Voltage vs. Peak Pulse Current

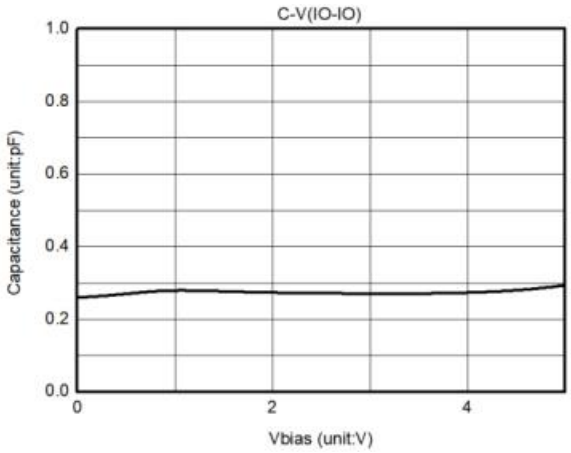


Figure 2: Junction Capacitance vs. Reverse Voltage

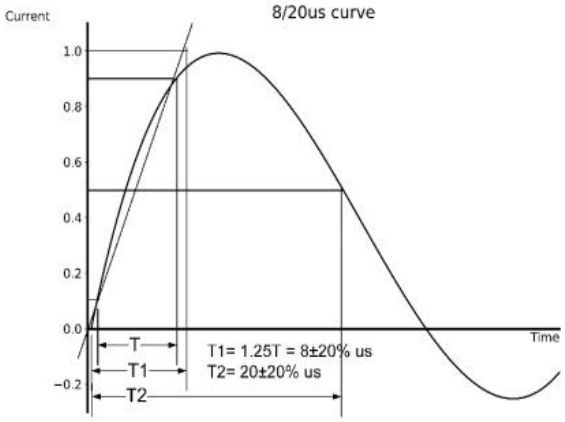


Figure 3: 8 X 20us Pulse Waveform

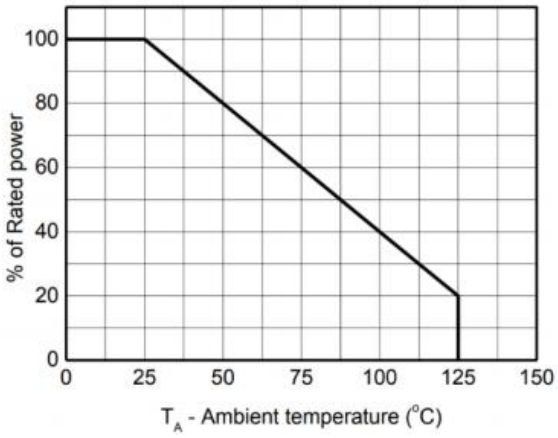


Figure 4: Power derating vs. Ambient temperature

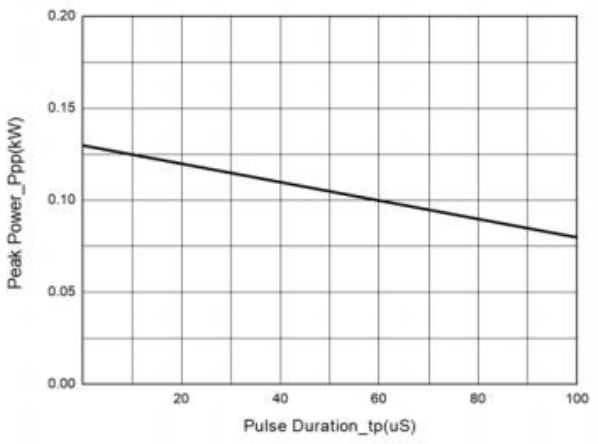


Figure 5: Peak Pulse Power vs. Pulse Time

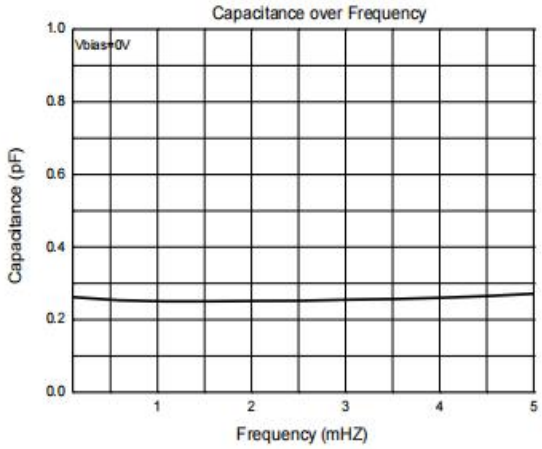
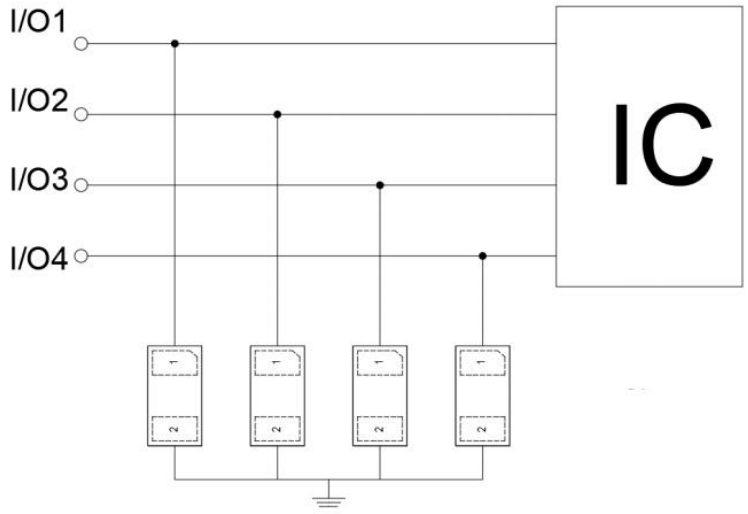
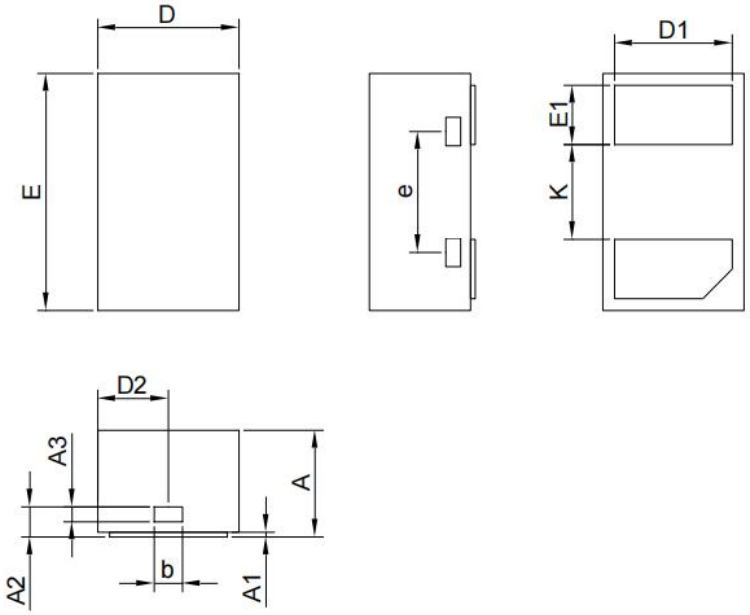


Figure 6: Capacitance over Frequency

■Typical Applications 典型应用



■ Dimension 外形封装尺寸



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