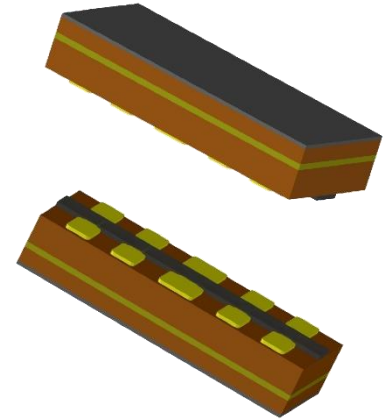


## Ultra-low capacitance ESD Suppressor

### 超低电容 ESD 抑制器

- ESD protection of high-speed data lines exceeding IEC61000-4-2 (ESD): 15 kV air / 8kV contact
- Extremely small form factor down to 2.50 x 1.0 x 0.50 mm<sup>3</sup> with 4 Channel protection
- Continue working voltage: 24 Vdc max.
- Extremely low capacitance: 0.10 pF typ.
- Low clamping voltage: 35V typ.
- Very low leakage current: <0.10 nA typ.
- Pb-free (RoHS compliant) package
- 针对高速数据传输线路的 ESD 保护:  
IEC61000-4-2 (ESD): 空气放电 15 kV / 接触放电 8kV
- 极小的产品尺寸:四通道的保护而尺寸仅仅为 2.50 x 1.0 x 0.50 mm<sup>3</sup>
- 持续工作电压: 最大 24Vdc
- 超低电容: 典型值 0.10pF
- 低钳位电压: 典型值 35V
- 超低漏电流: 一般小于 0.10 nA
- 无铅封装



### Application

#### 应用

- Computers and peripherals, HDTV Equipment
- DVD Players, Satellite radio, Cell phones, Digital still cameras, Digital camcorders
- Set top boxes
- High speed data ports: USB 2.0/3.0, IEEE 1394b, HDMI 1.3, DVI
- Keyboard/key switch
- 计算机及外设, HDTV 设备等
- DVD 播放器, 卫星广播, 移动电话, 数码相机, 数码 DV 等
- 机顶盒
- 高速数据接口: USB 2.0/3.0, IEEE 1394b, HDMI 1.3, DVI
- 按键开关



**Electrical Characteristics**

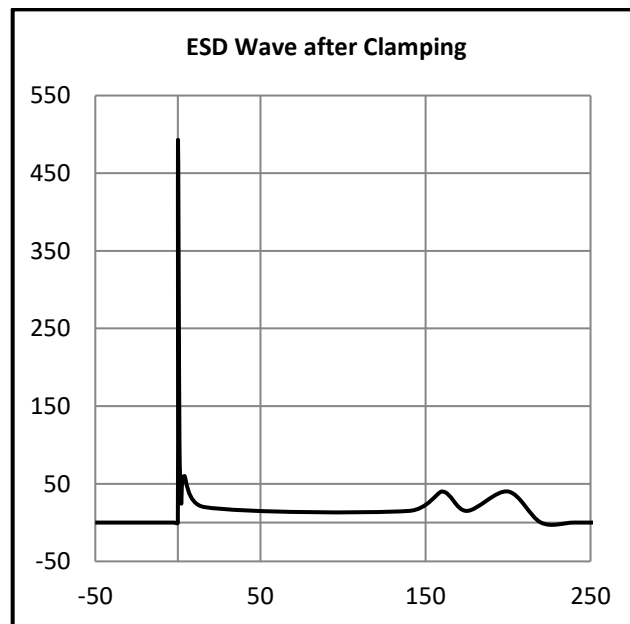
电气特性

Specification	Units	Minimum	Typical	Maximum
Operating Voltage 工作电压	V (DC)	-	-	24
Clamping Voltage 钳位电压	V	-	35	
Trigger Voltage 触发电压	V	-	450	-
Response time 反应时间	ns	-	<1ns	-
ESD Threat Voltage Capability ESD 保护能力	IEC 61000-4-2 8kV Direct Discharge / 15kV Air Discharge			
Capacitance (@1MHz) 电容	pF	-	0.10	-
Leakage Current (@ 5Vdc) 漏电流	nA	<0.1nA typical		
Operating Temperature 工作温度	°C	-40	+25	+90

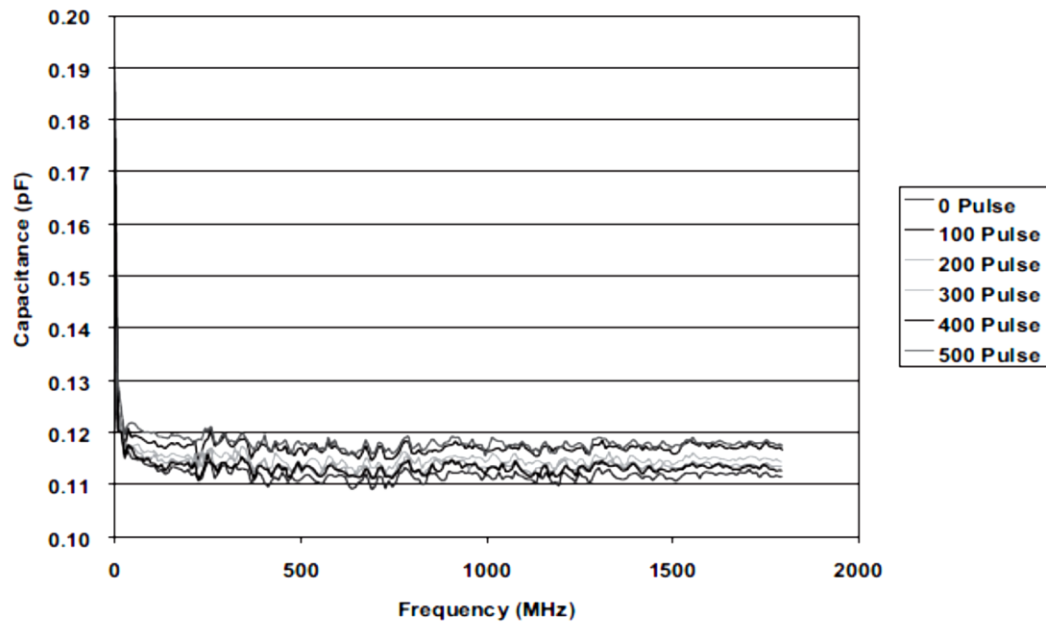
**ESD Performance**

The device react within 1ns to clamp the ESD voltage.

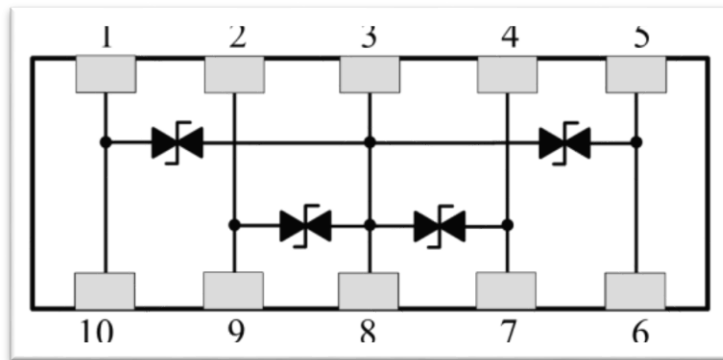
器件在 1ns 内快速反应以钳制 ESD 电压



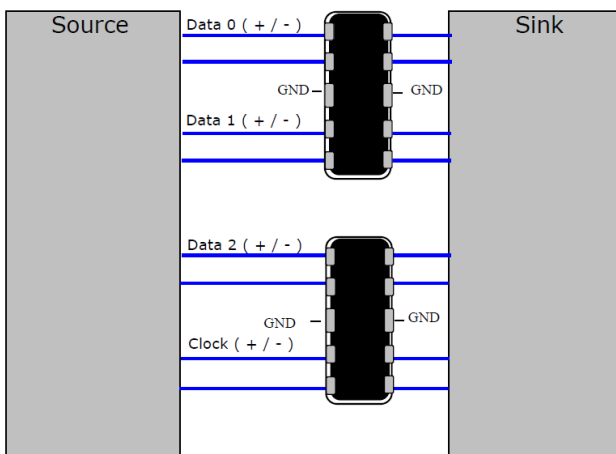
Signal Frequency does not affect the Capacitance of the Device  
 器件电容不受信号频率影响



Circuit Symbol  
 等效电路图

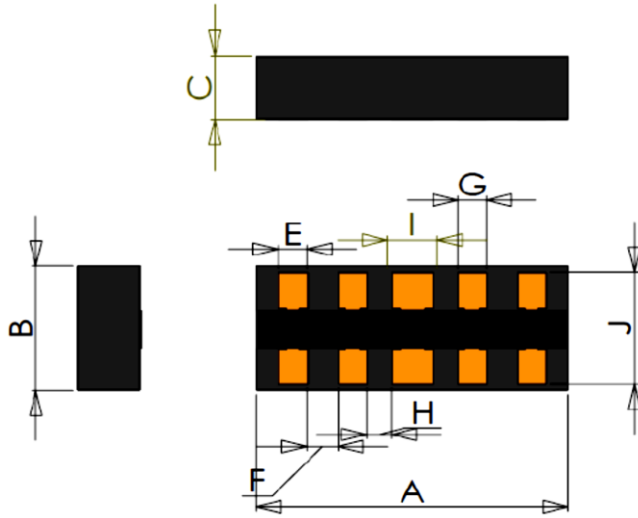


Pin	Identification
1, 2, 4, 5	Data lines
6, 7, 9, 10	Data lines (No internal connection)
3, 8 (GND)	Ground



Package outline

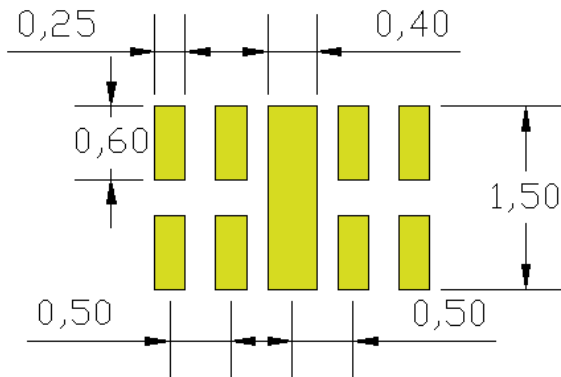
封装尺寸



Symbol	Dimension			Unit
	Min	Typ	Max	
A	2.40	2.50	2.60	mm
B	0.90	1.00	1.10	
C	0.40	0.50	0.60	
E	0.21	0.23	0.25	
F	0.23	0.25	0.27	
G	0.21	0.23	0.25	
H	0.18	0.20	0.22	
I	0.315	0.335	0.355	
J	0.89	0.91	0.93	

Soldering pad (unit:mm)

建议焊盘尺寸(单位: mm)

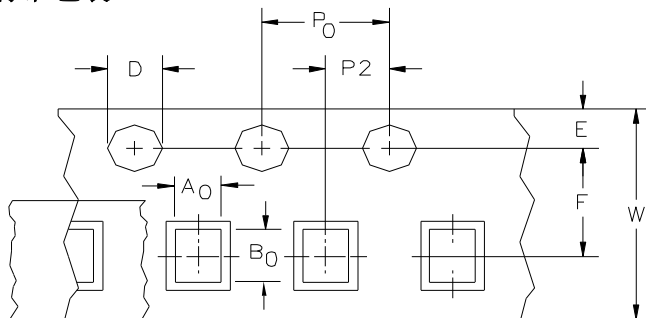


Note: Print solder in thickness of 0.08mm to 0.12mm

注: 锡膏印刷厚度 0.08 毫米到 0.12 毫米

Standard Packing

标准包装



Dimension	Typical	Unit
A0	1.15	mm
B0	2.65	
D	1.55	
P0	4.00	
P1	4.00	
P2	2.00	
E	1.75	
F	3.50	
W	8.00	

3000pcs in 7" reel per EIA Standard 481.



ADVANCED SURGETECH MATERIALS

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