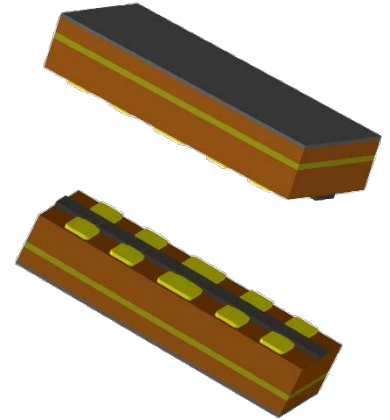


## Ultra-low capacitance ESD Suppressor

### 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: 5 Vdc max.
- Extremely low capacitance: 0.10 pF typ.
- Low clamping voltage: 35V typ.
- Very low leakage current: <0.10 μA max.
- 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 5Vdc
- 超低电容: 典型值 0.10pF
- 低钳位电压: 典型值 35V
- 超低漏电流: 不超过 0.10 μA
- 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**

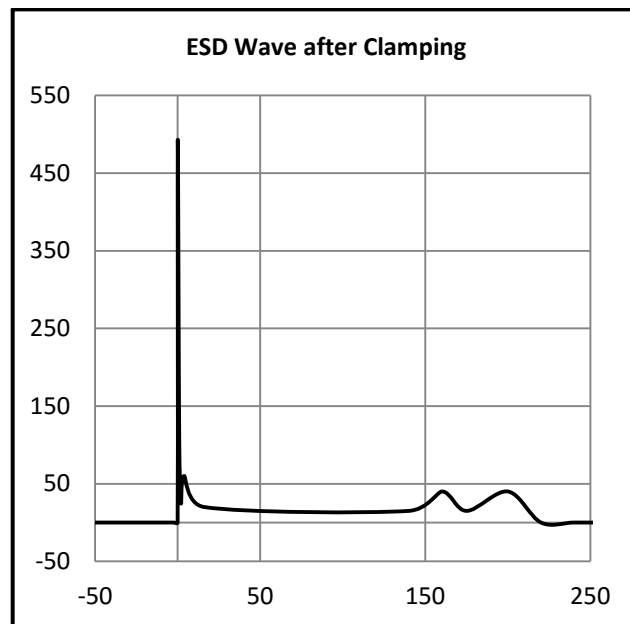
电气特性

Specification	Units	Minimum	Typical	Maximum
Operating Voltage 工作电压	V (DC)	-	-	5
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	μA	-	-	0.10
Operating Temperature 工作温度	°C	-40	+25	+90

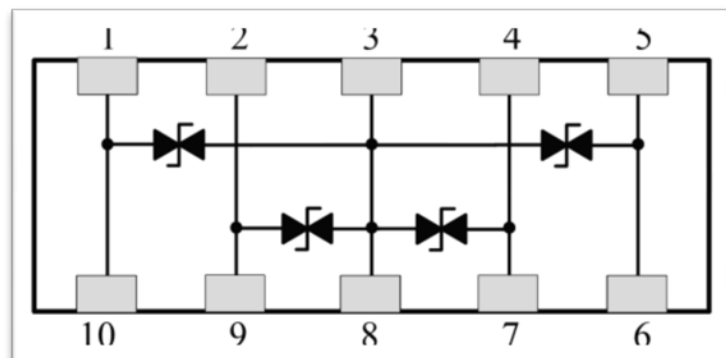
**ESD Performance**

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

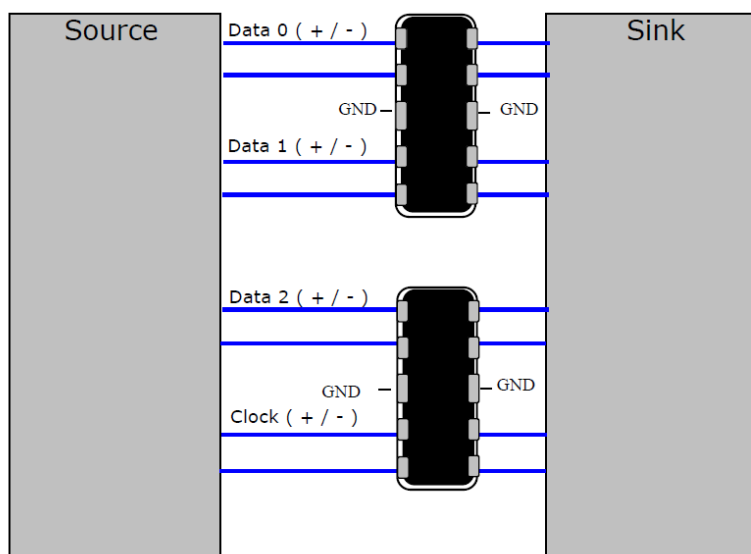
器件在 1ns 内快速反应以钳制 ESD 电压



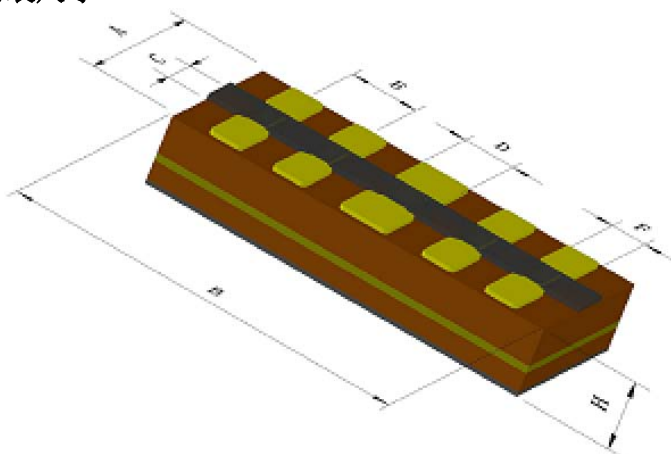
**Circuit Symbol**  
等效电路图



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

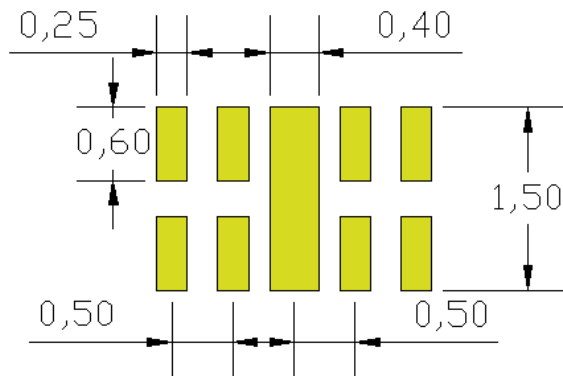


**Package outline**  
封装尺寸



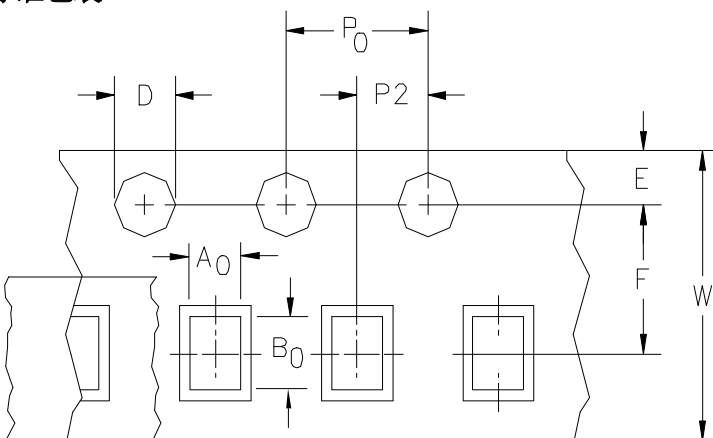
A	1.0±0.1 mm
B	2.5±0.1 mm
H	0.45±0.05 mm
C	0.3±0.05 mm
D	0.3±0.05 mm
E	0.45±0.05 mm
F	0.20±0.05 mm

**Soldering pad (unit:mm)**  
**建议焊盘尺寸(单位: mm)**



Note: Print solder in thickness of 0.15mm to 0.20mm  
 注: 锡膏印刷厚度 0.15 毫米到 0.20 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.

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