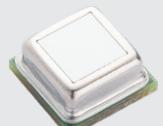
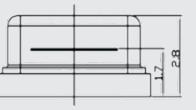
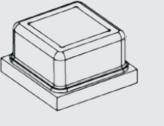
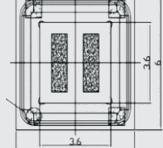
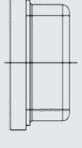
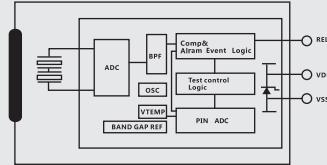
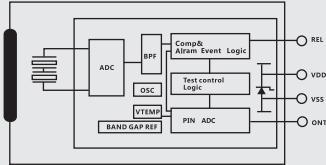
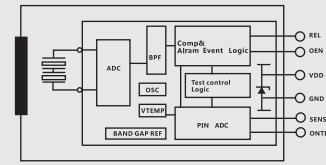
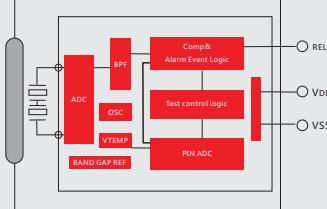
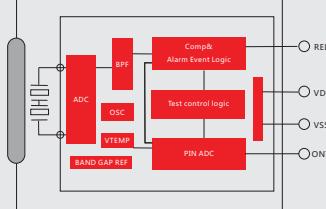
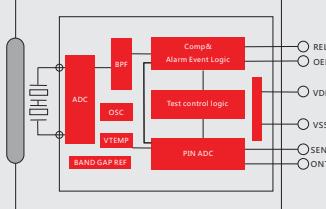
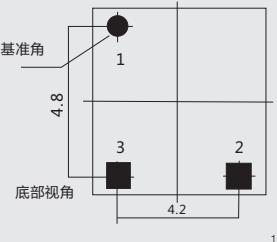
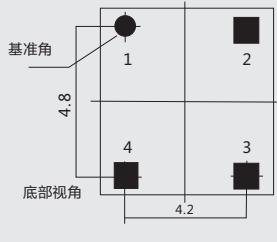
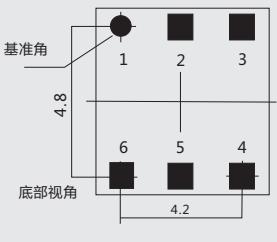




# 熱釋電紅外傳感器 PYROELECTRIC INFRARED SENSOR

Type 型號	S16-L201D	S16-L211D	S16-L221D
	 		 
Supply voltage 電源電壓	2.7~3.3V	2.7~3.3V	2.7~3.3V
Pins 引腳數	3pins	4pins	6pins
Window size 窗口大小	3.6 × 3.6mm	3.6 × 3.6mm	3.6 × 3.6mm
Current 工作電流	15μA	15μA	15μA
Sensitivity 靈敏度閾值	120μV	120μV	120~530μV
Interior diagram 內部方框圖			
Typical application circuit 典型應用電路			
Dimensions 脚位尺寸圖	 底部视角 基准角 4.8 4.2 1.REL 2.VDD 3.VSS	 底部视角 基准角 4.8 4.2 1.REL 2.ONTIME 3.VDD 4.VSS	 底部视角 基准角 4.8 4.2 1.REL 2.ONTIME 3.OEN 4.VDD 5.SENS 6.VSS



# 熱釋電紅外傳感器

## PYROELECTRIC INFRARED SENSOR

### Product Description 產品概述

The product is a digital intelligent PIR sensor. It interfaces directly with up to two conventional PIR sensors via a high impedance differential input. The PIR signal is converted to a 15 bit digital value on chip. A LED output indicates whenever the PIR Signal is above the selected threshold. The parameters for sensitivity and timing are set by connecting the corresponding inputs to DC voltages. The voltage levels on the inputs are converted to digital values with 7 bit resolution. All signal processing is performed digitally.

該產品是將數字智能控制電路與人體探測敏感元都集成在電磁屏蔽罩內的熱釋電紅外傳感器。人體探測敏感元將感應到的人體移動信號通過甚高阻抗差分輸入電路耦合到數字智能集成電路芯片上，數字智能集成電路將信號轉化成15位ADC數字信號，當PIR信號超過選定的數字閾值時就會有定時的REL電平輸出。OEN使能端可使REL輸出或通過光照傳感器自動控制。靈敏度和時間參數通過電阻設置，對應相應的數值，其電壓被轉化成帶有7位分辨率的數值。所有的信號處理都在芯片上完成。

### Features 特性

- Digital Signal Processing
- Differential inputs
- Second order Butterworth low-pass filter, removing other higher frequency interference
- High supply rejection, High immunity to RFI
- Output time adjustable, Schmitt REL output for sensitivity
- Low supply voltage
- Low current consumption
  
- 小型SMD回流焊貼裝方式
- 數字信號處理四個敏感單元，Y軸方向同樣靈敏
- 使能電源調節，實現節能
- 內置濾波器，抗幹擾強靈敏度、
- 定時、光照施密特REL輸出
- 低電壓、低功耗

### Applications 用途

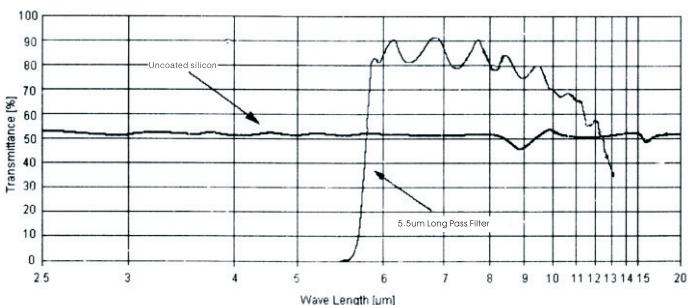
- Toys、Digital photo frame、TV、Refrigerator、Air-condition、Alarms、PIR motion detection、Intruder detection、IOT sensor、Sense light、Computer monitor、Security system、Car security system、Corridor and stair lights, etc.
- 玩具、數碼相框、電視機、冰箱、空調、USB報警器、PIR運動檢測  
入侵檢測、占位檢測、物聯網傳感器、感應燈、網絡攝像機、局域網監控、私人警報器、汽車防盜系統、室內燈、走廊、樓梯燈等的自動亮起和熄燈等。

### Technical parameter 性能參數

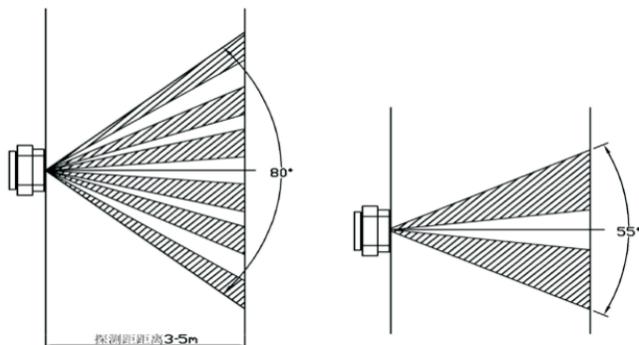
#### Maximum Rating 最大額定值

Parameter 參數	Symbol 符號	Min 最小值	Max 最大值	Unit 單位
Supply Voltage 電源電壓	V <sub>DD</sub>	-0.3	3.3	V
Operating Temp 工作溫度	T <sub>OT</sub>	-30	70	℃
Limit Current of Pin 任何引腳極限	I <sub>INTO</sub>	-100	100	mA
Storage Temp 存儲溫度	T <sub>ST</sub>	-40	80	℃

#### The transmission spectrum of the window material 窗口材料的透射光譜



### Field of View 探測視角



### Dimensions 外觀尺寸圖

