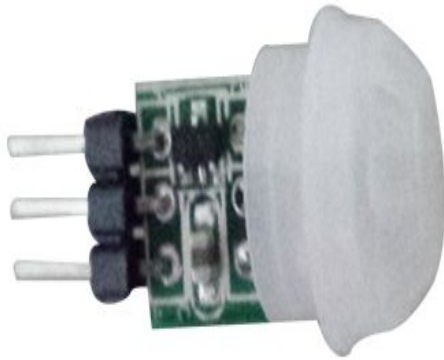


## **PIR Motion Detector Module**



### **Item No.: SB312A**

#### **General**

SB312A is the latest digital sensor module which developed for human body detection. A digital PIR sensor combined with a Fresnel lens is mounted on a compact size PCB, and resistance. IC is not needed any more. Digital output improve the performance.

#### **Features and Electrical Specification**

Compact size: 8\*10 mm

Supply Voltage: DC3V~12V

Quiescent Current :  $\leq 20\mu A$

Voltage Output: High level signal 3V; Standby output is 0V

High sensitivity

Delay time: 2.3S

Blockade time: 2.3S

Trigger mode: Repeatable triggered

Operation Temperature:  $-20^{\circ}C \sim +55^{\circ}C$

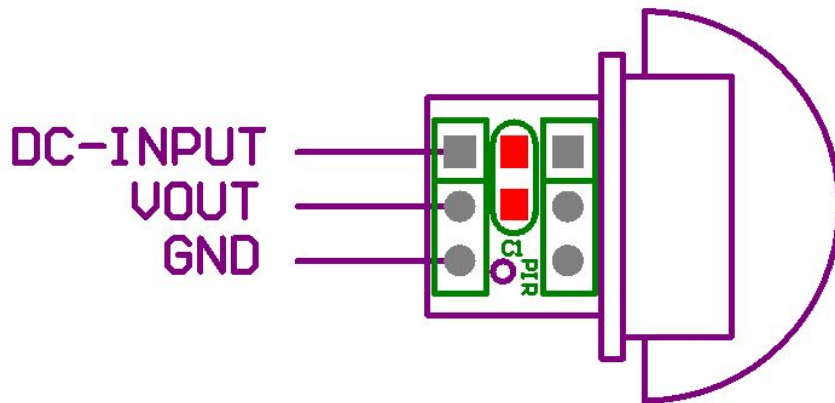
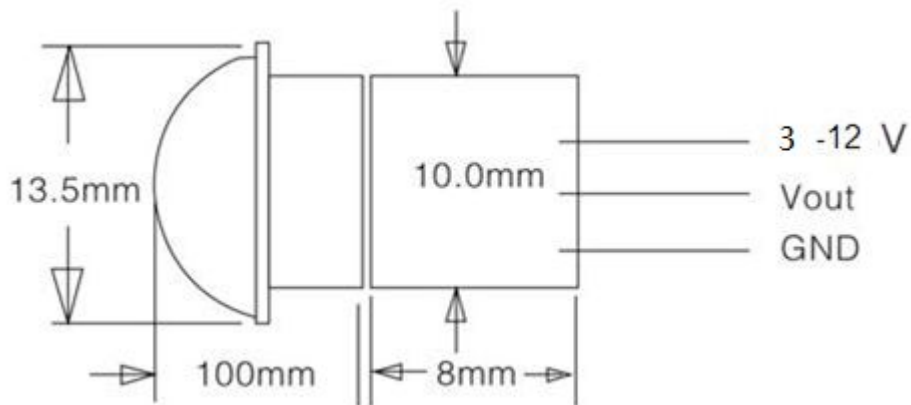
Infrared sensor: dual element, low noise, high sensitivity

Detecting length: 3~5m

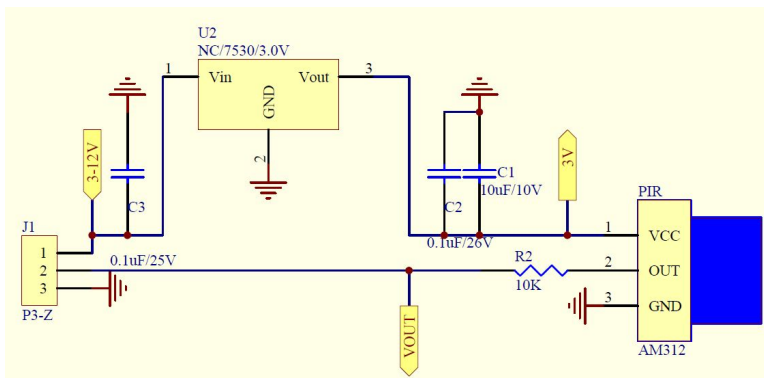
Detecting Angle:  $\geq 100^{\circ}$

#### **Lens information**

Lens diameter: 13.5mm (default), detecting angle  $\geq 100^\circ$ , detecting range  $< 5M$ .



## Schematic Diagram



## **Application Note**

The SB312A module only output High/Low level.

### **Funtions:**

1. DC-INPUT: working voltage or input supply voltage (range is DC 3V~12V)
2. VOUT: signal output pin. Output: High level signal 3V; Standby 0V。

## **Parameter Setting**

### **Input voltage and Quiescent current**

According to the input voltage,the current of module $\leq 20\mu\text{A}$ :

## **Note**

Due to the high sensitivity of PIR sensor device, it is not recommended to use the module in the following or similar condition.

- A) in rapid environmental changes
- B) in strong shock or vibration
- C) in a place where there are obstructing material (eg. glass) through which IR cannot pass within detection area.
- D) exposed to direct sun light
- E) exposed to direct wind from a heater or air condition



SENBA OPTOELECTRONIC NANYANG SENBA OPTICAL AND ELECTRONIC CO. LTD. SHENZHEN BRANCH

**Add :** 2<sup>nd</sup> Floor, #D Building,Huawan Industry Zone, Gushu, Xixiang Street ,

Bao'an Dist.,ShenZhen City China

**Website:** [www.nysenba.com](http://www.nysenba.com)

**E-mail :** [daisy@sbcde.com.cn](mailto:daisy@sbcde.com.cn)

**Tel :** 86-755-82591635

**Fax :** 86-755-82594762