



**Nanyang Senba Optical and Electronic Co., Ltd.**

## **PIR Motion Detector Module**



**Item No.: SB00322A-1**

### **General**

SB00322A-1 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.

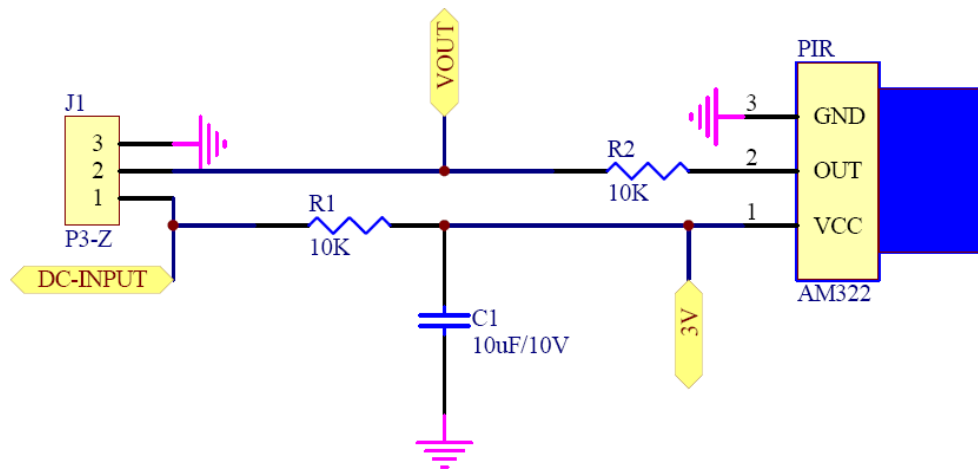
### **Features and Electrical Specification**

Compact size: 8\*10 mm  
Supply current: DC3.3V-15V  
Current drain :< 1mA  
Voltage Output: High/Low level signal, 3V  
Digital output  
High sensitivity  
Delay time: 2S  
Blockade time:2S  
Operation Temperature: -20-60℃  
Infrared sensor: dual element, low noise, high sensitivity  
Detecting length:3-5m  
Detecting Angle:110degree

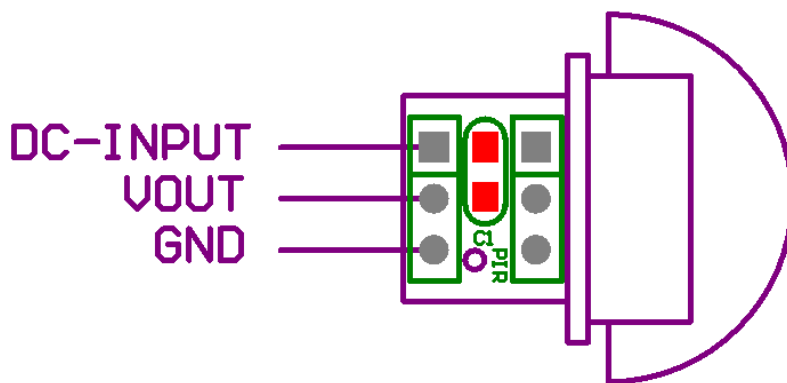
### **Lens information**

Lens diameter: 13.5mm (default), detecting angle≤110℃, detecting range<5M.

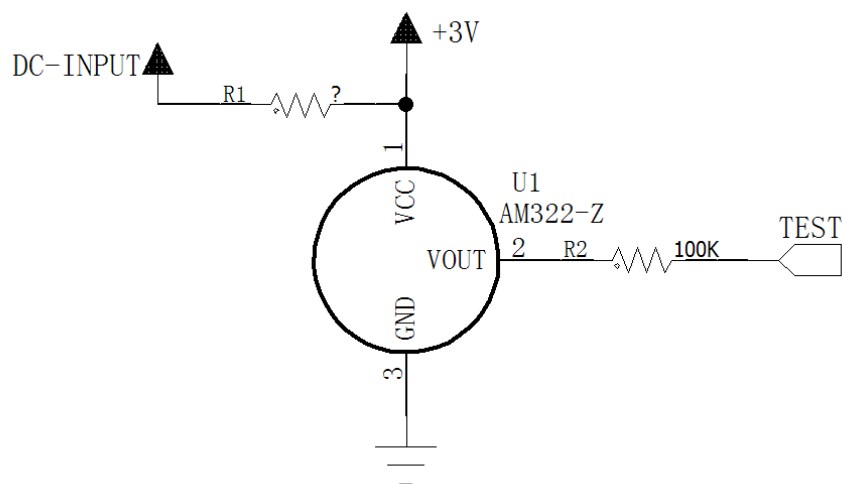
## Schematic Diagram



## Application Note



## AM322 PIR Sensor diagram



## **Parameter Setting**

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

Want to make the quiescent current lower,the Q1 can not to be Triode but MOS.also need adjust the R1 according to the input voltage,the current of R1<100uA:

Input voltage	R1
3.3V	3K
4V	10K
5V	20K
6V	30K
9V	68K
12V	100K
15V	120K

If use Triode,R2 must be added

### **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, No.4 Building,Huawan Industry Zone, Gushu, Xixiang Street ,  
Bao'an Dist.,ShenZhen City China

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

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

**Tel :** 86-755-82594732

**Fax :** 86-755-82594762