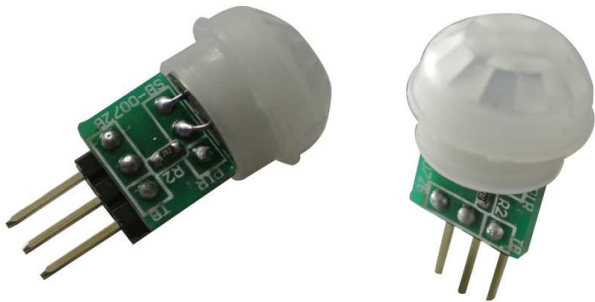




## Nanyang Senba Optical and Electronic Co., Ltd.



**Model 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

High sensitivity

Delay time: 2S

Blockade time:2S

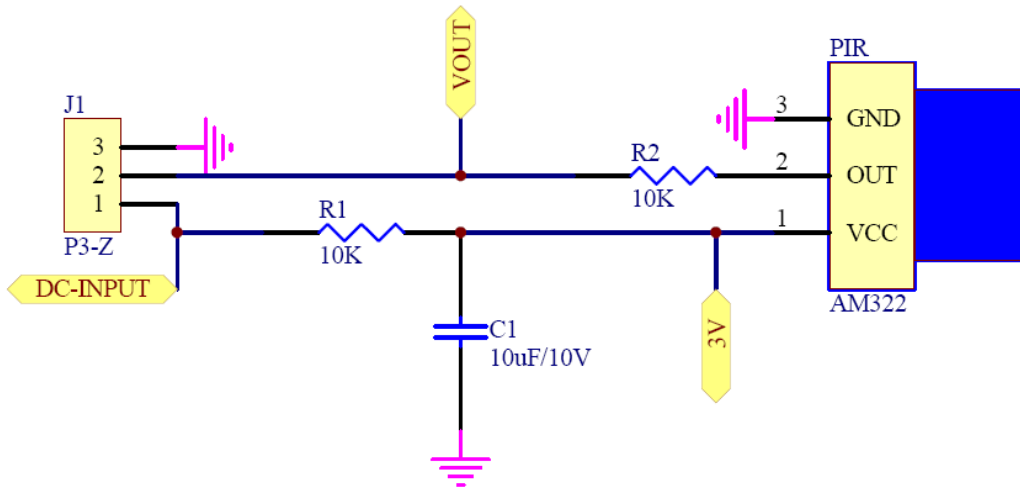
Operation Temperature: -20-80°C

Infrared sensor: dual element, low noise, high sensitivity

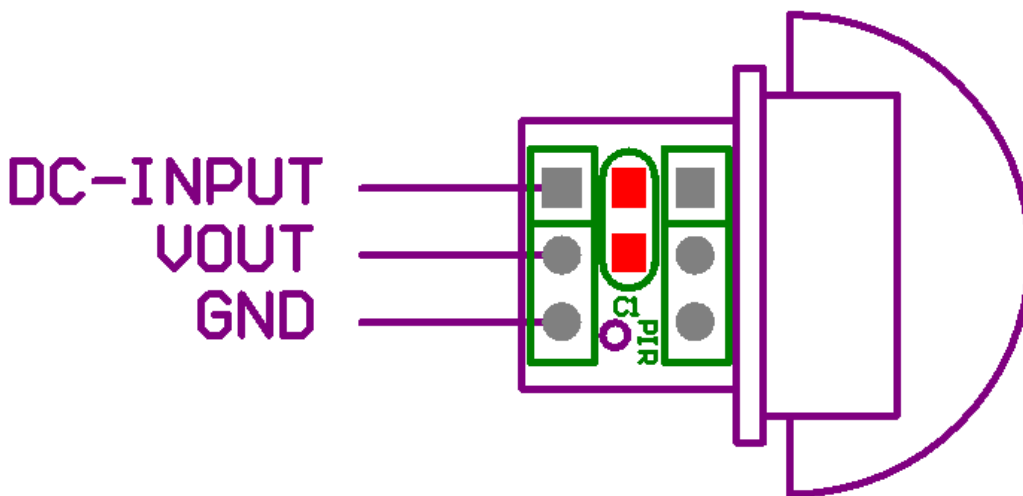
Detecting length:2-5m

Detecting Angle:100degree

## Circuit schematic



## Module Information:



## Note:

1. DC-INPUT: supply voltage (DC 3.3V-15V)
2. Vout: pin for signal output. With output, high level signal (3V); no output, low level signal (0V)

## Parameters setting

### *Supply voltage and static current*

If smaller current is needed, change the load driver Q1 to MOS transistor, no triode. Also need to adjust the R1 according to the supply voltage, to make the current of R1 less than 100uA. See the table below:

Supply voltage	Current limit resistor
3.3V	3K
4V	10K
5V	20K
6V	30K
9V	68K
12V	100K
15V	120K

If use triode as Q1, there must be a current limit resistor as R2.

## 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 & ELECTRONIC CO. LTD.**

### SHENZHEN BRANCH

**Add:** 2<sup>nd</sup> Floor, No.4 Building, Huawan Industry Zone, Gushu, Xixiang Street, Bao'an District., Shenzhen City, China

**Website:** <http://en.nysenba.com>

**E-mail:** [cindy@nysenba.com](mailto:cindy@nysenba.com)

**Tel:** 86-755-82591635

**Fax:** 86-755-82594762