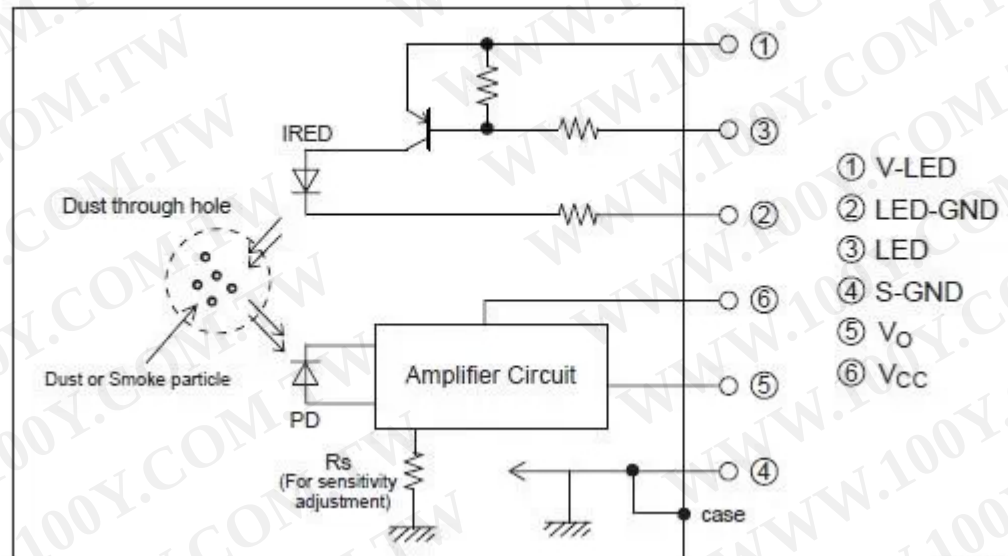


勝特力材料 886-3-5753170
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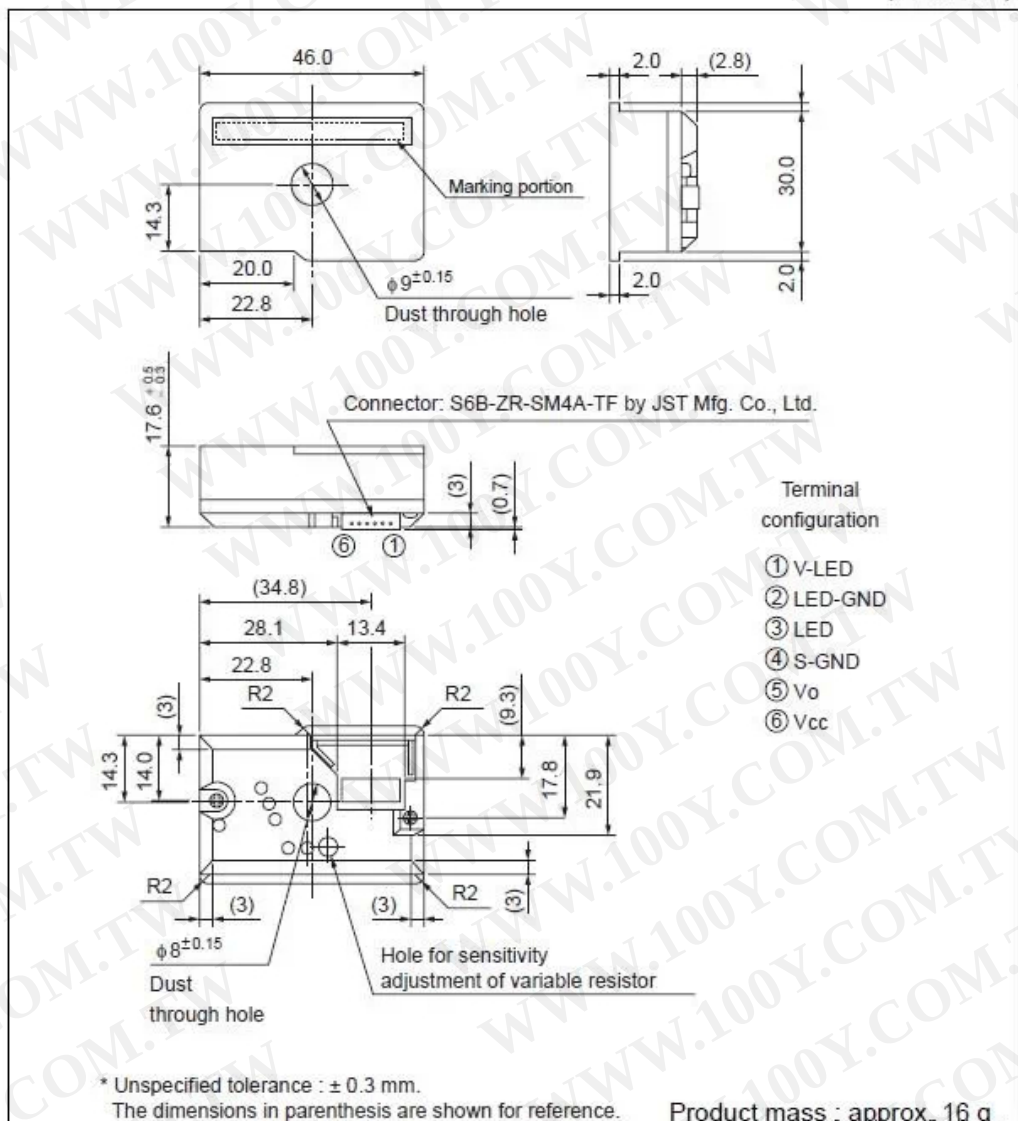
- | | |
|------------------------------|-----|
| 1、配線 2.0mm-6P | 1 條 |
| 2、150 歐電阻 1/4W | 1 只 |
| 3、220uF 電解電容 | 1 只 |
| GP2Y1010AU0F 灰塵感測器 PM2.5 感測器 | |

Internal schematic



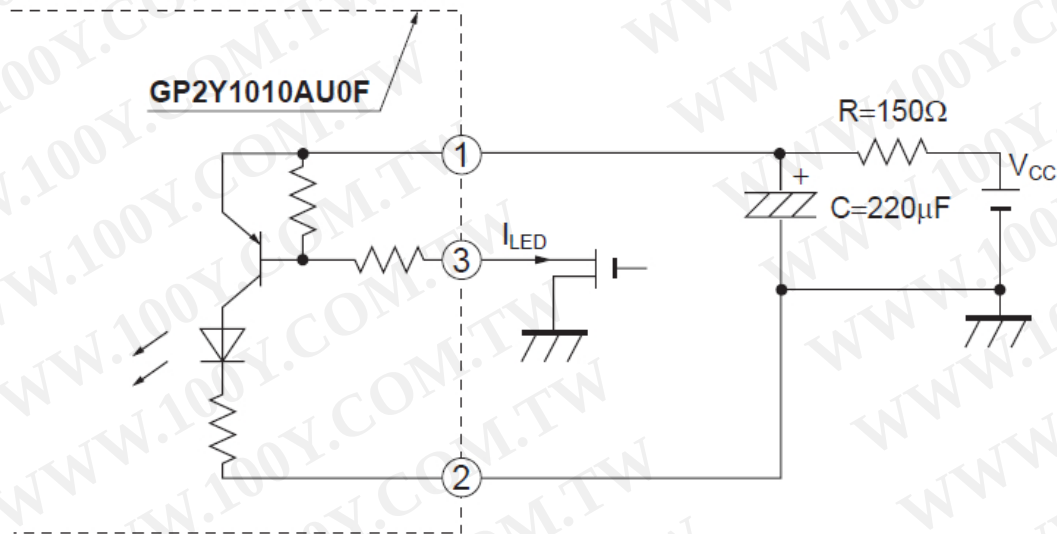
Outline Dimensions

(Unit : mm)



该传感器具有非常低的电流消耗（最大20mA，11毫安典型值），最高7VDC供电。

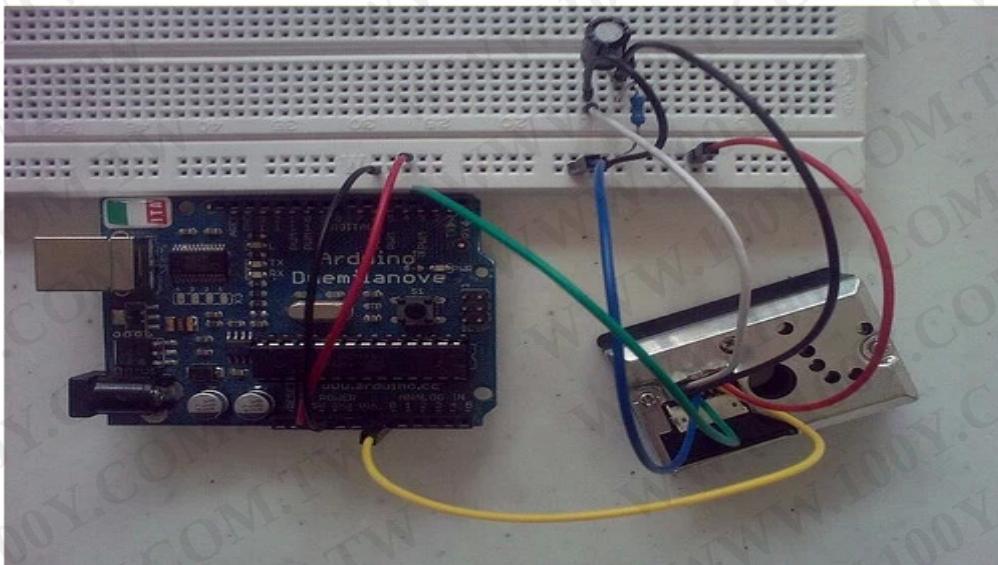
传感器的输出是一个模拟电压成正比的测量粉尘密度，具有0.5V/0.1mg/m3的灵敏度。



Sensor Pin	Arduino Pin
1	Vled -> 5V(150欧姆电阻)
2	LED- -> GND
3	LED -> Digital pin 2
4	S-GND -> GND
5	Vo -> Analog pin 0
6	Vcc -> 5V

The LED pin has to be modulated with a cycle of 1ms as discussed in the datasheet.

The LED seems to use a PNP transistor so to power on, the LED pin must actually receive a lower voltage.



Arduino 源代码

```
01 int dustPin=0;
02 int dustVal=0;
03
04 int ledPower=2;
05 int delayTime=280;
06 int delayTime2=40;
07 float offTime=9680;
08 void setup() {
09   Serial.begin(9600);
10   pinMode(ledPower,OUTPUT);
11   pinMode(4, OUTPUT);
12 }
13
14 void loop() {
15   // ledPower is any digital pin on the arduino connected to Pin 3 on
16   digitalWrite(ledPower,LOW); // power on the LED
17   delayMicroseconds(delayTime);
18   dustVal=analogRead(dustPin); // read the dust value via pin 5 on th
19   delayMicroseconds(delayTime2);
20   digitalWrite(ledPower,HIGH); // turn the LED off
21   delayMicroseconds(offTime);
22
23   delay(3000);
24   Serial.println(dustVal);
25 }
```

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