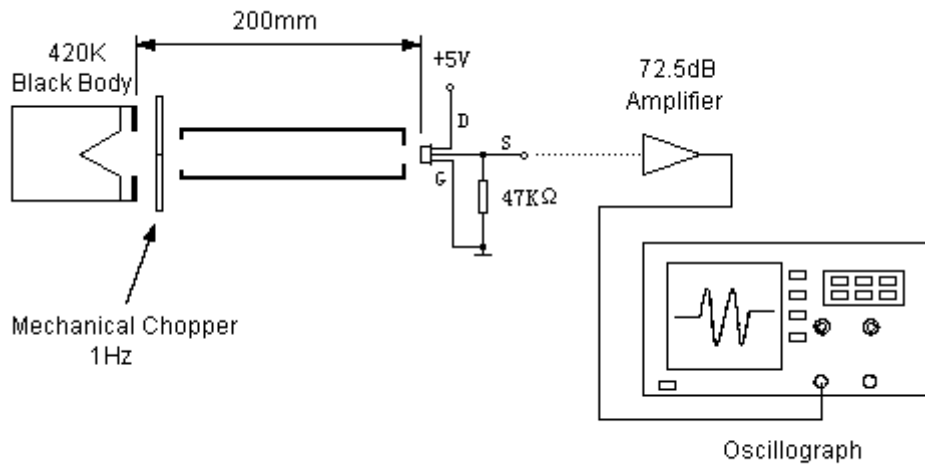


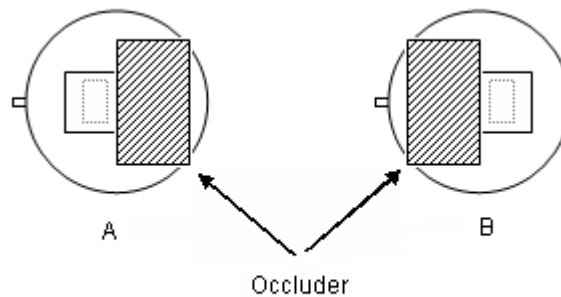
Pyroelectric Infrared Radial Sensor

Model:D203B

PIR SENSOR CO., LTD

Test Method

Test conditions

- ◆ Ambient temperature 25°C
- ◆ Black-body temperature 420K(147°C)
- ◆ Modulating frequency 1 Hz, 0.3-3.5Hz Δf ,
- ◆ 72.5 dB Amplifier



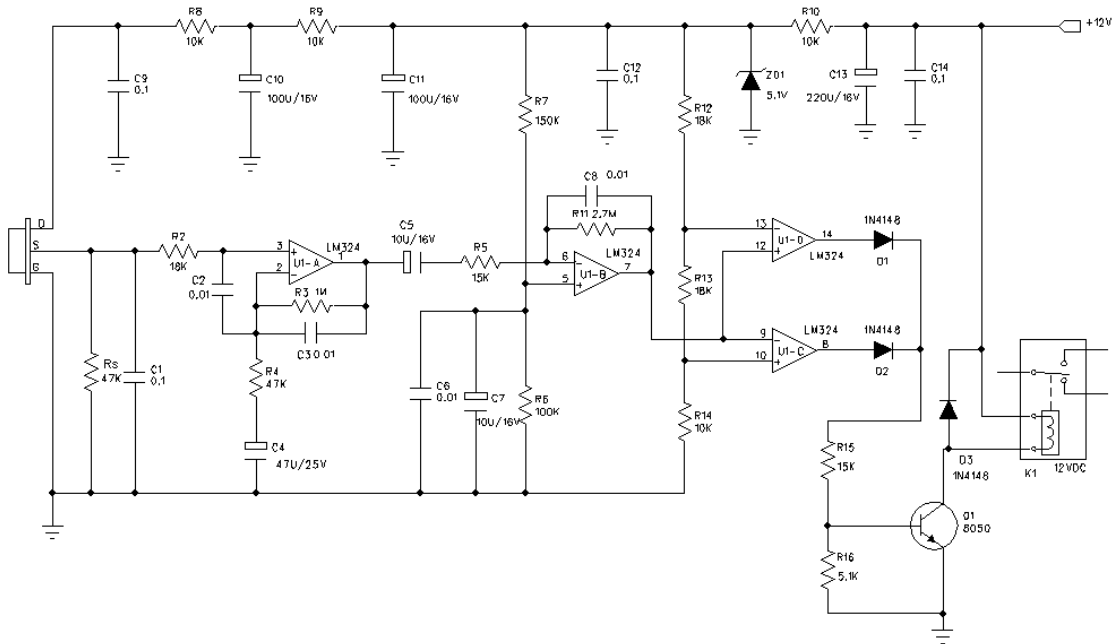
The sensitivity balance of dual element sensor is calculated through testing the sensitivity (single signal output voltage) of each element and using the following formula:

$$\text{Balance} = |V_A - V_B| / (V_A + V_B) \times 100\%$$

$$V_A = \text{Sensitivity of side A (mVp-p)}$$

$$V_B = \text{Sensitivity of side B (mVp-p)}$$

Typical Application



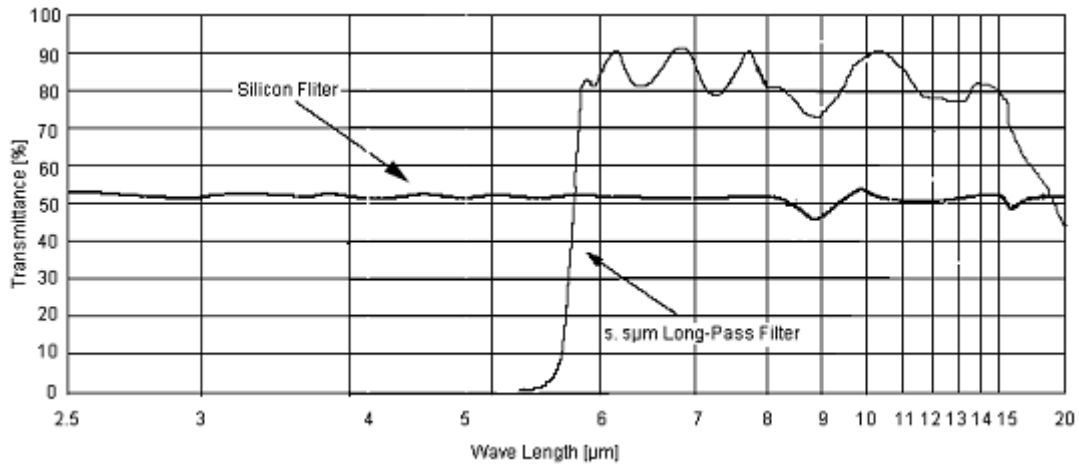
Notice:

U1A-D:LM324

Vdd:12V DC

Rs=47KΩ @ on an offset voltage

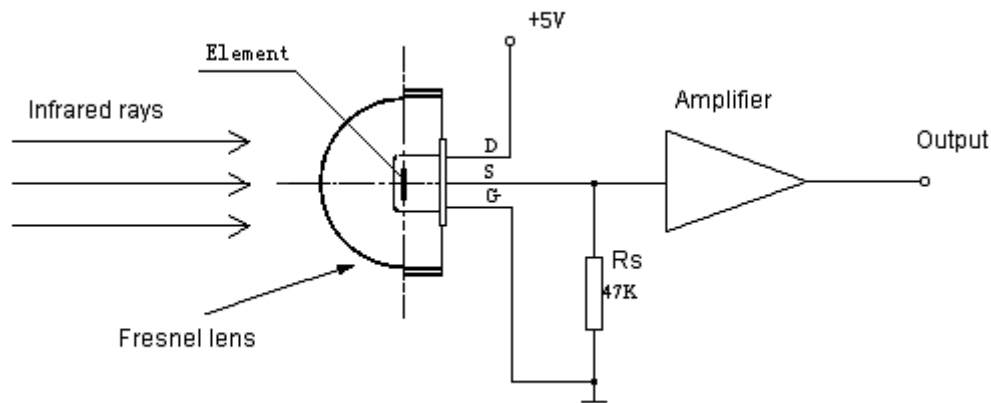
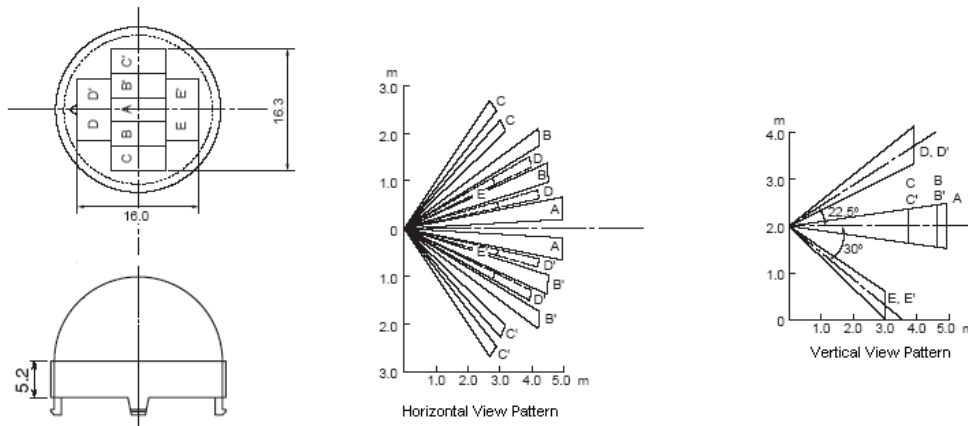
Spectral Response of Window Materials



Notice:

The above curve is the typical figure of 5.5 μm pass IR filter, the curve is the average value of IR transmittance, the window's substrate is vacuum-coated with semiconductor material.

■ Fresnel Lens for Human Body Detection



■ Directions for Use

- Pay attention to the mounting direction of the sensor's element and the size of element ichnography. Combining with focus of Fresnel lens can achieve a optimal optics design.
- The ex-factory parameter of sensor is gained by testing in the condition of standard Black Body and the relevant circuit after one minute steadying-time.
- The detecting distance of sensor is a multidimensional function, consisting of ambient temperature, temperature of moving target , target distance of Fresnel Lens', ambient humidity , amplifier gain and comparison voltage.
- The welding shall be made at 4mm above as per the recommendation for lead wire of sensor seat, and the welding should be completed in the shortest possible time.
- Do not touch the window by hand and the hard things directly.
- Strong shake and static should be avoided.
- This products are packed with the environmental protection material ,and the sensors' surface has been covered specially with OHK anti-erode material, 100pcs per small package ,3000pcs per large package.

