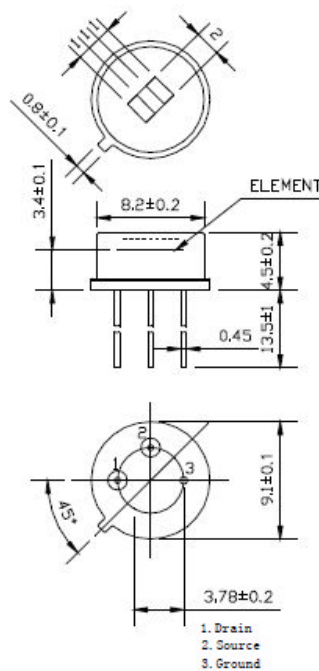


Technical information of Pyro-electric Infra-Red sensor

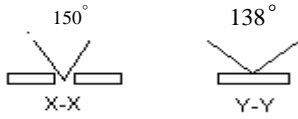
Type: PIS-209D

| Characteristics | 209B | Unit | Test conditions (at 20+/-5C) |
|---------------------------------------|-------------------|---------------------------------|------------------------------|
| Detector type | Due element. | 2x1mm 2 sensitivity element. | |
| Housing | TO-5 | | |
| Window size | 3.8 x 5 | mm | |
| Receiving Wavelength | 7-14 | μm | |
| Transmittance | >75% | | |
| Responsivity Min | 3500 | Vp-p | |
| Sensitivity | 3200 | V/W | |
| Noise Voltage Max. | 70 | mVp-p | |
| Source Voltage Min. Typ. Max. | 0.2 0.6 1.5 | V | Supply Voltage 5VDC |
| Operating Voltage Min. Typ. Max | 3 9 15 | V | DC |
| Operating temp. range | -30~+70 | °C | |
| Storage temp. range | -40~+80 | °C | |

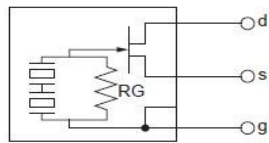
Dimension:



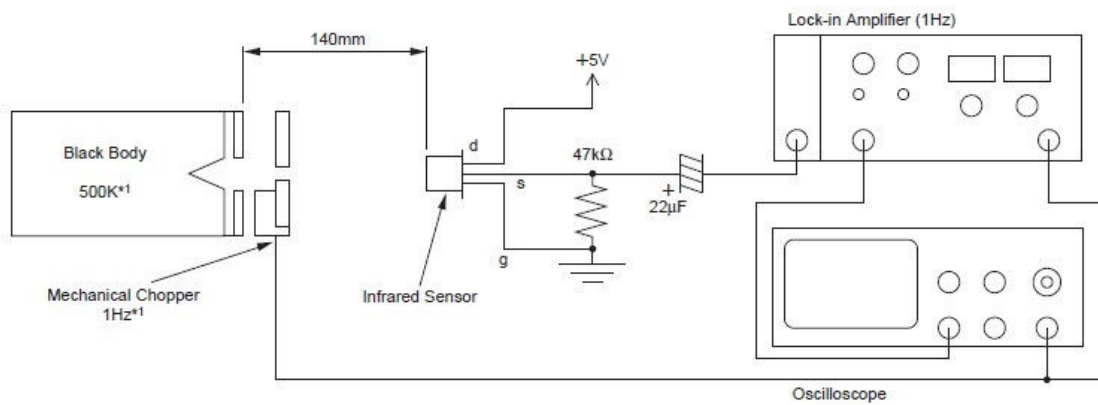
Detecting Angle:



Basic Test Circuit

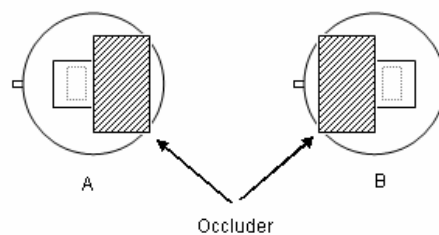


Test Manner



Testing Condition

- ◆ Environment Temperature: 25°C
- ◆ Blackbody temperature: 420K
- ◆ Modulation frequency 1HZ, 0.3~3.5HZ Δf
- ◆ Magnification: 72.5 dB



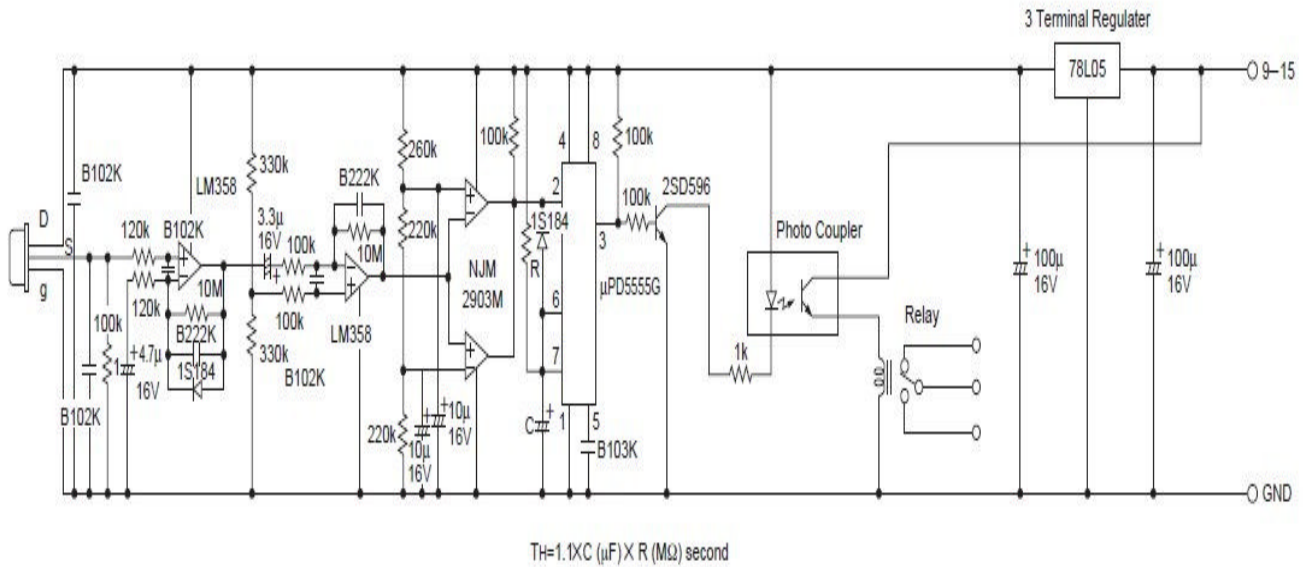
Dual sensing element will be get by detecting each cell's sensitivity from follow following formula:

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

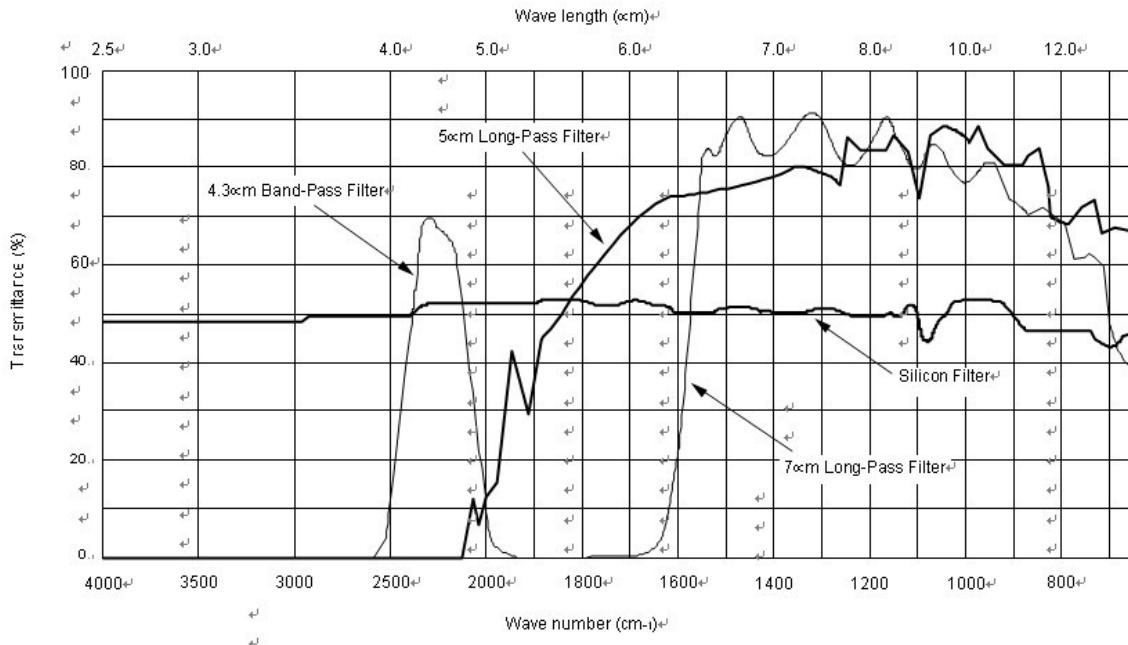
V_A = Surface A sensitivity (mVp-p)

V_B = Surface B sensitivity (mVp-p)

Typical application circuit



The receiving wavelength of the window material



Note: We reserve the right to change sensor characters without notice.