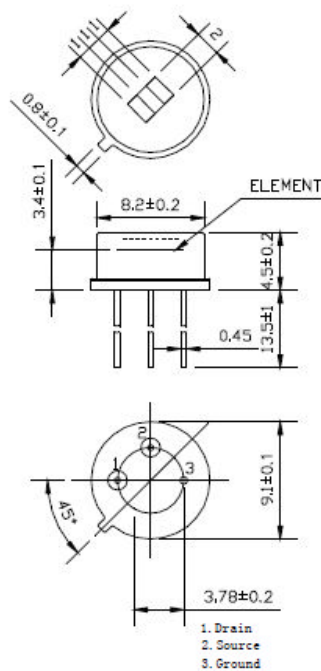


Technical information of Pyro-electric Infra-Red sensor

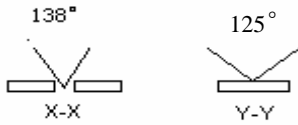
Type: PIS-209B

Characteristics	209B	Unit	Test conditions (at 20+/-5C)
Detector type	Due element.	2x1mm 2 sensitivity element.	
Housing	TO-5		
Window size	3 x 4	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.	0.3 0.6 1.2	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	

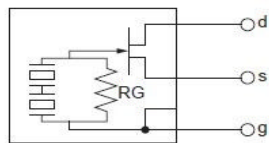
Dimension:



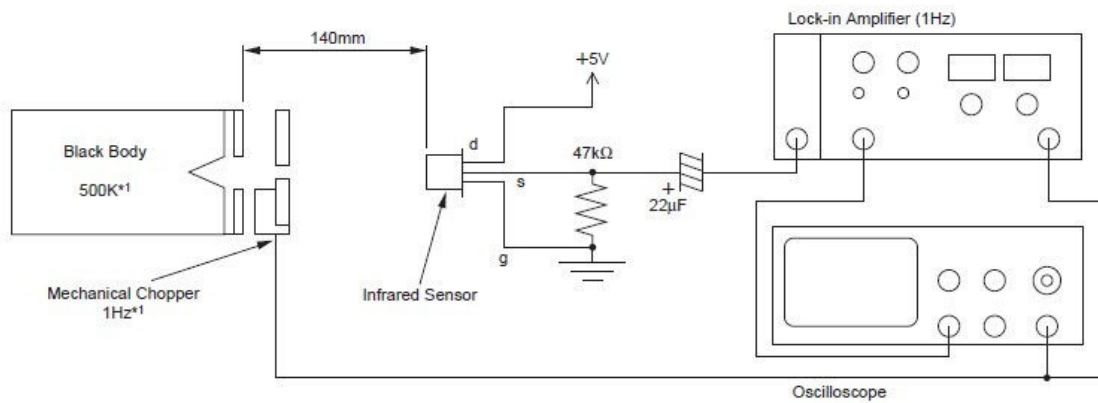
Detecting angle:



Basic Test Circuit

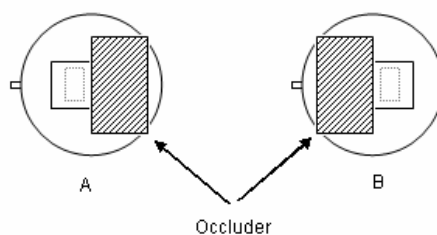


Test Manner



Testing Condition

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



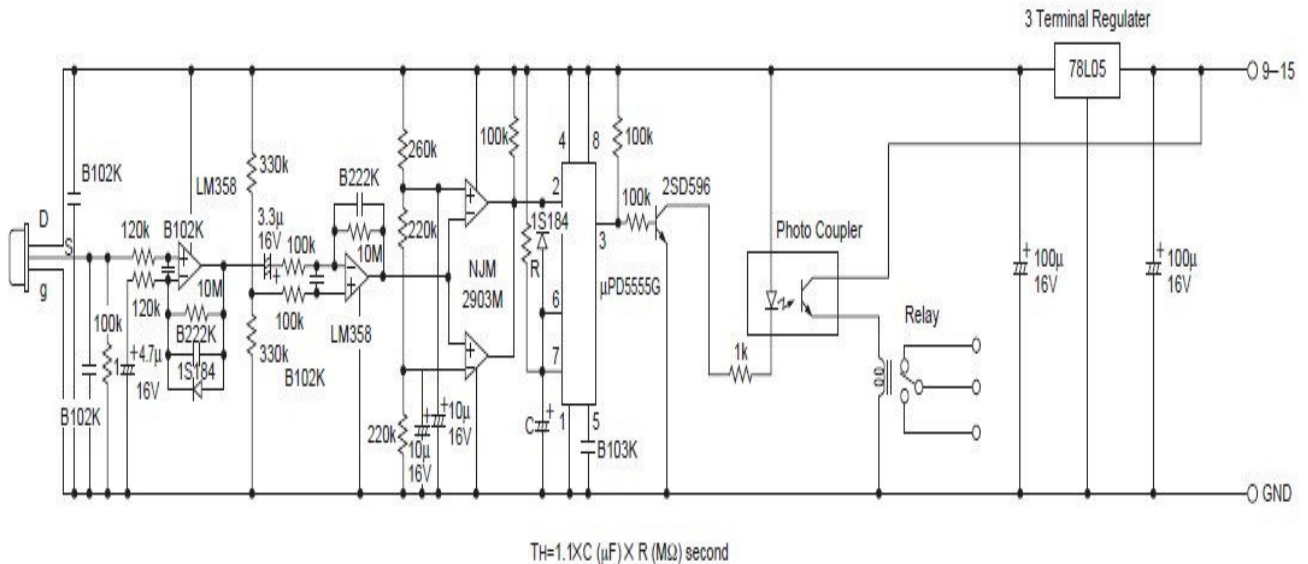
Dual sensing element will be get by detecting each cell's sensitivity from follow following formula:

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

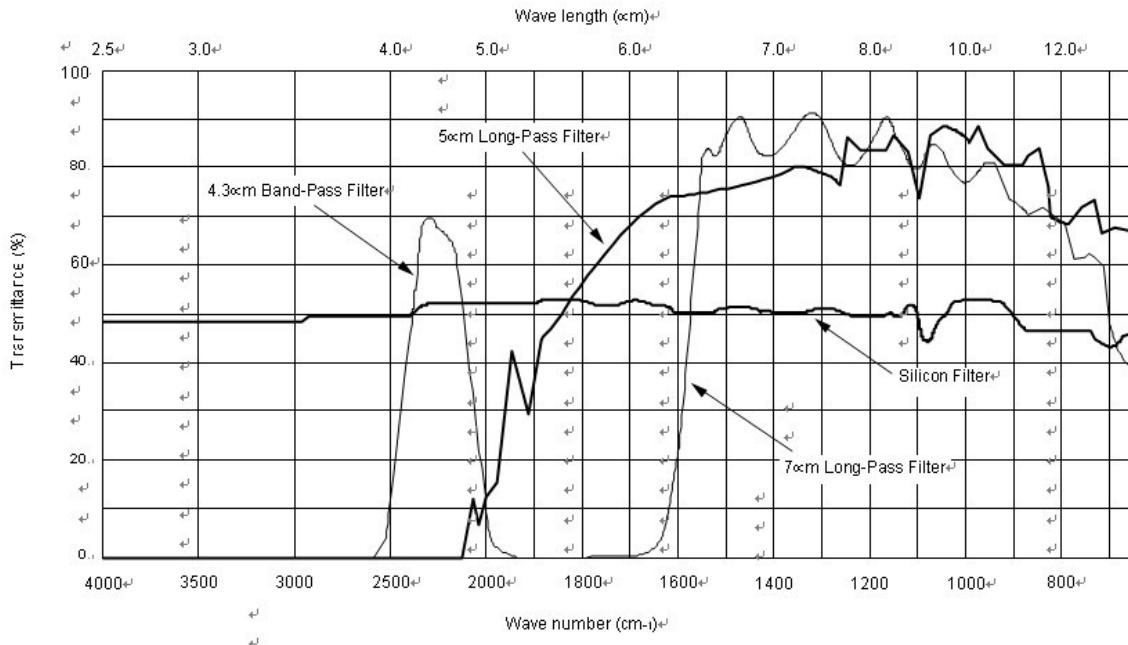
V_A = Surface A sensitivity (mVp-p)

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.