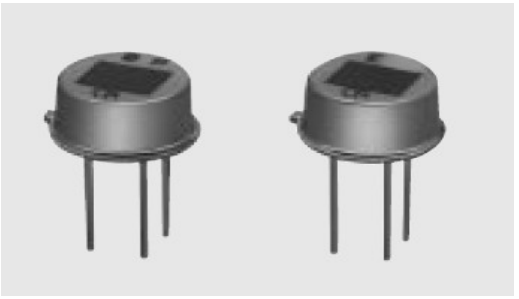
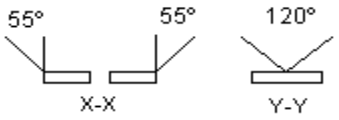
Datasheet

(SIR)

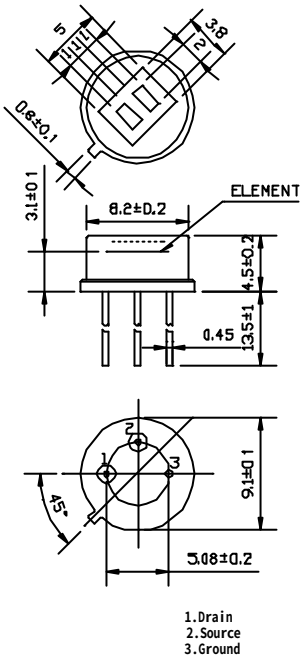
SIR202B Pyroelectric Infrared Sensor



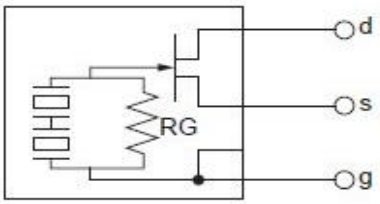
Performance Parameter

Model	SIR202B
Encapsulation	TO-5
Infrared receiving electrode	2X1mm, 2 sensitive element
Window size	3.8×5 mm
Receive wavelength	7—14 um
Transmittance	>75%
Peak output signal [Vp-p]	3500 mV
Sensitivity	3200 V/W
Detectivity (D*)	1.4 ×10^{8} cmHz$^{1/2}$/W
Noise peak [Vp-p]	<70 mV
Output balance	<10%
Source voltage	0.2～1.5 V
Supply voltage	2—15 V
Working temperature	-30—70oC
Storage temperature	-40—80oC
Incident view Angle diagram	

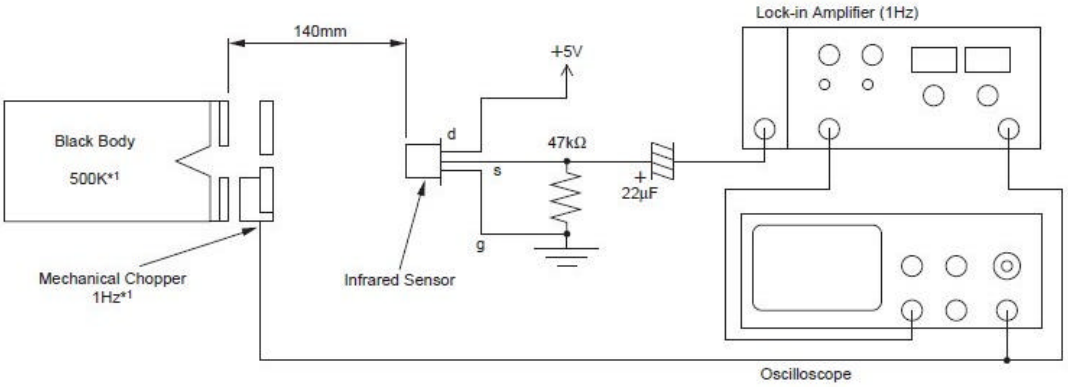
Component Shape Structure



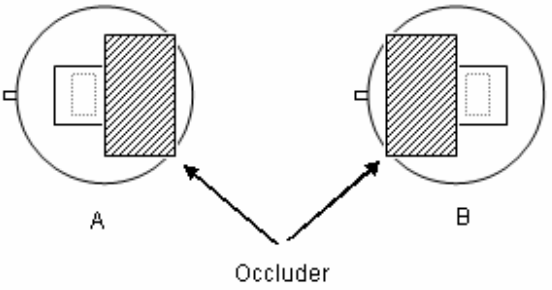
Basic Test Circuit



Test Method



Test Condition: Environment temperature:25°C
Blackbody temperature: 420K
Modulation frequency 1HZ, 0.3~3.5 HZ△**f**
Magnification times 72.5 dB



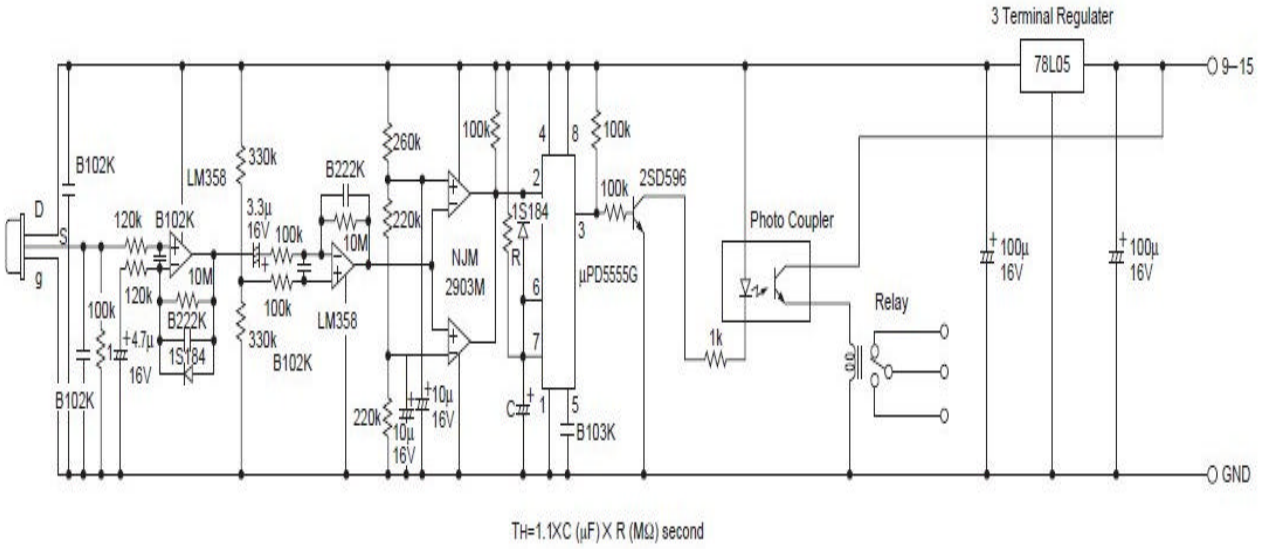
The sensitive balance of the dual-element sensor is calculated by measuring the sensitivity of each element (i.e., a single output peak voltage) and using the following formula

Degree of balance = **|VA-VB|/(VA+VB) ×100%**

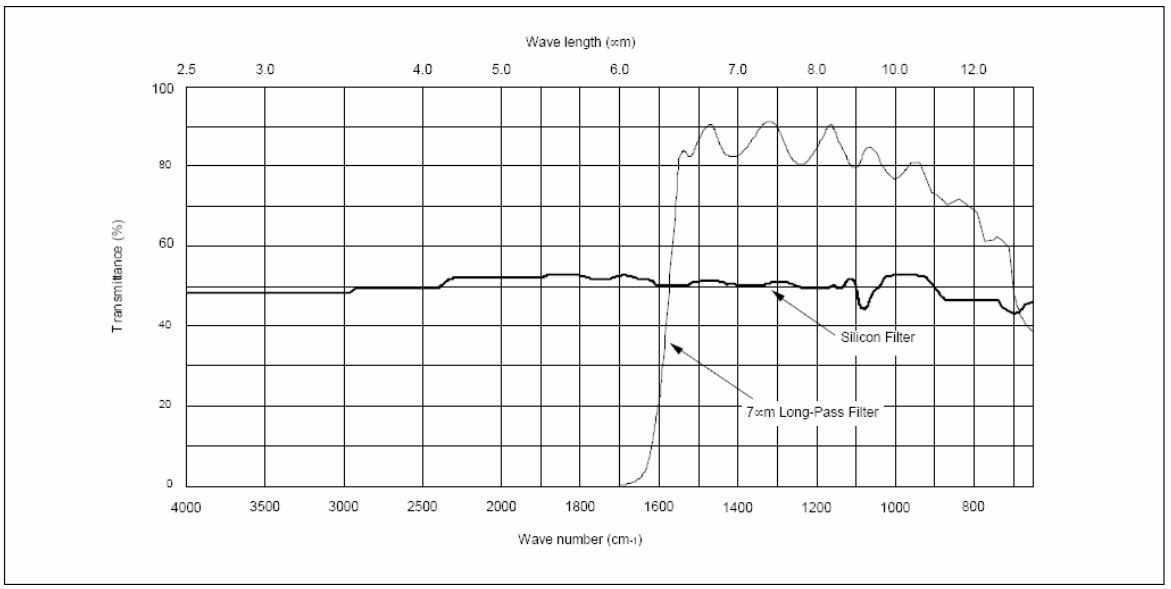
VA = A side sensitivity **(mVp-p)**

VB = B side sensitivity **(mVp-p)**

Typical Application Circuit



Receptive Wavelength of Window Material



Note: The company will not notice any changes to the version of the specification