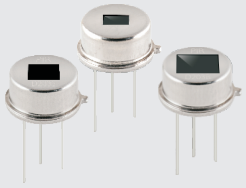





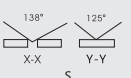

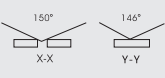
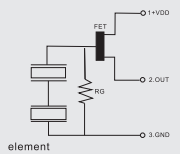
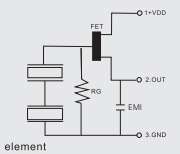
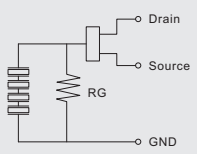
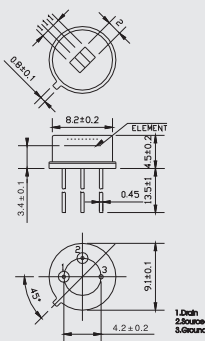
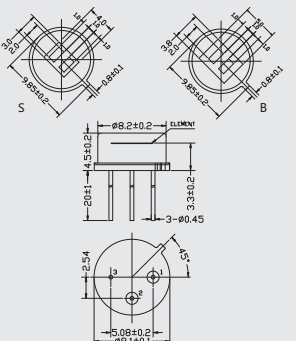
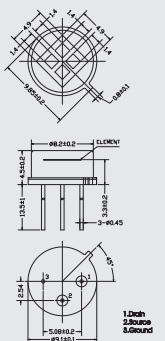
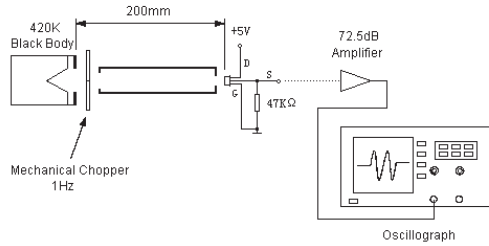
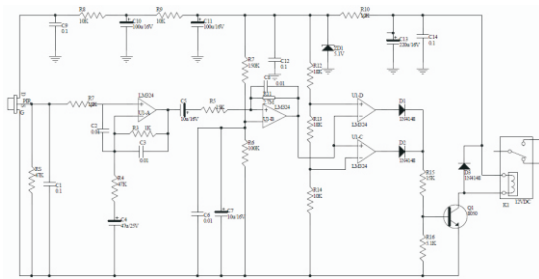


Type 型號	D202X	D203S/B	D204S/B	D205B
				
Window Size 窗口尺寸	2×3mm	3×4mm(S系列)	5×3.8mm(B系列)	4.9×4.9mm
IR Receiving Electrode 紅外接收電極	2×1mm, 2elements			0.7×2.4mm, 4 elements
Package Type 封裝	TO-5			
Spectral Response 接收波長	5~14 μm			
Transmissivity 透過率	≥75%			
Output Signal[Vp-p] 輸出信號峰值	≥3300mV	≥3500mV		≥5000mV
Sensitivity 靈敏度	≥3100V/W	≥3300V/W		≥4300V/W
Detectivity (D*) 探測率	1.4 × 10 ⁸ cmHz ^{1/2} /W			1.6 × 10 ⁸ cmHz ^{1/2} /W
Noise[Vp-p] 雜訊峰值	<70mV			
Output Balance 輸出平衡度	<10%			
Offset Voltage 源極電壓	0.3~1.2V			
Supply Voltage 電源電壓	3~15V			
Operating Temp 工作溫度範圍	-30~70°C			
Storage Temp 保存溫度範圍	-40~80°C			
Field of View 入射視角圖				
Equivalent Circuit 等效電路圖				
Dimensions 外型尺寸				

Test Method 測試方法



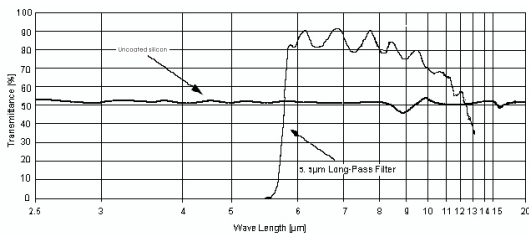
Typical Application 典型應用電路



Notice/注意

- IC: Lm324 Vdd: 12V DC Rs=47KΩ as reference voltage
- IC: Lm324 電源: 12伏直流 Rs=47KΩ, 作為參考電壓設置電阻

Spectral Response of Window Material 窗口材料的可接收通過波長

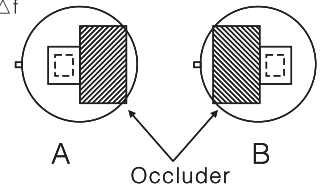


Notice/注意

The figure is the average transmissivity of typical 5.5 μ m IR filter. The window material is the silicon filter with special vacuum coated. 圖表所示為典型的5.5 μ m紅外濾光片參考圖，曲線是紅外線通過率的平均值。該窗口材料是經過特殊真空鍍膜處理過的半導體硅片。

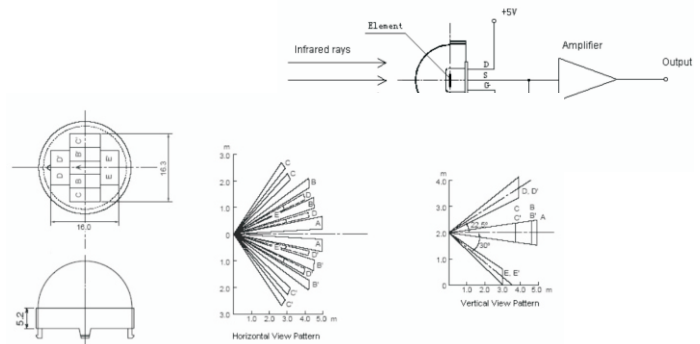
Measurement Condition 測量條件

- Circumstance temperature 25°
- Black-body temperature 420K(147°)
- Chopping frequency 1 Hz, 0.3 ~ 3.5Hz Δf
- 72.5dB amplifier
- 環境溫度 25°C
- 黑體溫度 420K(147°C)
- 調製頻率 1 赫茲, 0.3-3.5 赫茲 Δf



- 放大倍數 72.5 dB
- The sensitivity balance of dual elements sensor is calculated by measuring the sensitivity (signal output voltage) of each element and uses the formula as below:
- Balance = $(V_A - V_B) / (V_A + V_B) \times 100\%$ V_A = Sensitivity of side A (mV_{p-p})
- V_B = Sensitivity of side B (mV_{p-p})
- 雙元感測器的靈敏平衡度是通過測量每個單元的靈敏度 (即單個輸出峰值電壓)，並採用下列公式計算得出。
- 平衡度 = $(V_A - V_B) / (V_A + V_B) \times 100\%$ V_A = A 面的靈敏度 (mV_{p-p})
- V_B = B 面的靈敏度 (mV_{p-p})

Fresnel Lens for Body Detection 菲涅爾透鏡用於感測器的探測方位



配合左邊透鏡時的感應區域範圍 (僅供參考)，以上數據是在25°C的環境中測試的效果。

PIR Application 產品應用

