AO-1341
PIR Sensor Module

Features

- Single bit output
- Small size makes it easy to conceal
- Compatible with all types of microcontrollers
- 5V operation with 3.5mA current draw

Description

PIR (Passive Infrared Radiation) sensors are passive devices and they do not emit or radiate any energy or beams. The PIR sensor is an electronic ON – OFF switch designed specifically for switching or dimming lighting loads.

Each zone is constantly monitored by the sensor. When a person or other heat source enters any zone, the level of infrared radiation in that zone increases. This change is detected and processed by the sensor, switching on the connected lighting and starting the in-built 'Time' process.

Ordering Information

PART NUMBER	INPUT/OUTPUT	SIGNAL DETECT	VOLTAGE	TEMPERATURE
AO-1341	DC/DC	TTL	5V	0°C to 70 °C

APAC Opto Electronics Inc.
3 Tzu Chiang Road, Hsinchu Industrial Park
Hukow, Hsinchu Heisn, Taiwan 303
TEL: +886-3-5986799
FAX: +886-3-5986655
Website: www.apacoe.com.tw

Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN	MAX	UNITS	NOTE
Storage Temperature	T_S	−10	80	°C	
Supply Voltage	Vcc	0	5	V	
Input Voltage	V_{IN}	4.5	5.5	V	
Operating Current	I_{OP}	---	3.5	mA	

Recommended Operating Conditions

PARAMETER	SYMBOL	MIN	MAX	UNITS	NOTE
Operating ambient temperature range	T_A	0	70	°C	
Operating Input Voltage	V_{IN}	4.5	5.5	V	
Operating Current	I_{OP}	---	2.2	mA	

General Characteristics

PARAMETER	SPECIFICATION			UINTS
	MIN	TYE	MAX	
Sensor Type		Dual Element		
Sense Angle		120 (within 3~5 meter range)		°
Warm-up	---	---	5	Sec
Match	---	---	<10	%
Noise	---	20	50	μV_{p-p}
Effect Voltage	0.2	---	1.5	V
Window Material		Silicon, coated		
Spectral Range		Transmission Blocking T>30 (7~14mm), T<0.1 (5mm)		%

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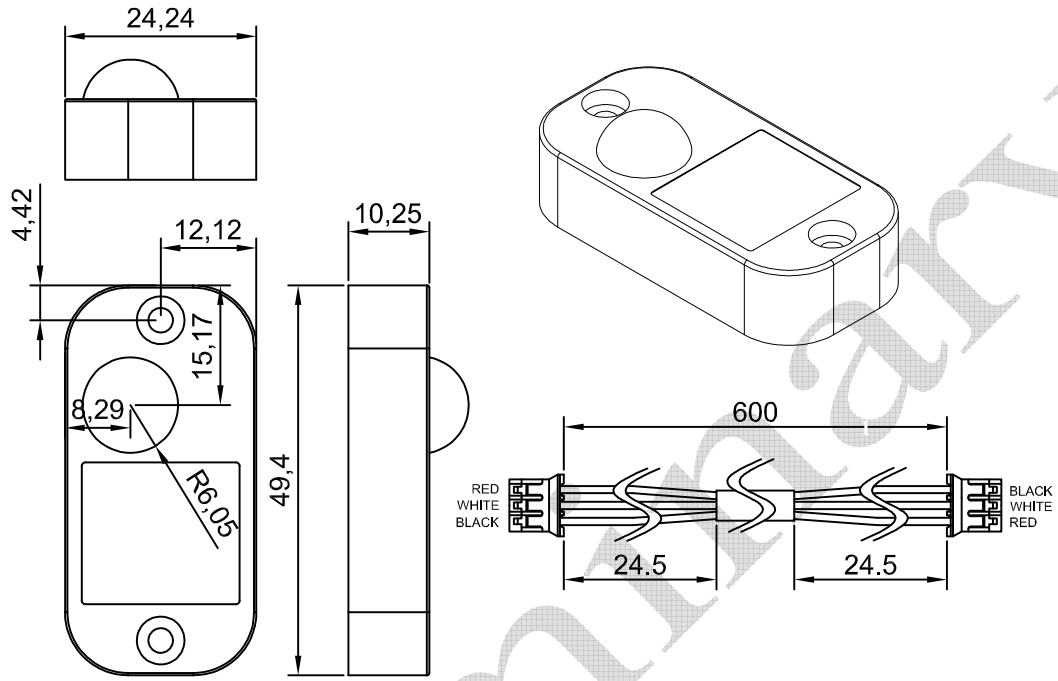
Dimensions



Unit: mm

Pin Definitions

Pin Color	Name	Function
Black	GND	Connects to Ground
White	Output	Open drain output, Connects to an I/O pin set to INPUT mode (or transistor/MOSFET)
Red	V_{cc}	Connects to Vcc (+5V) @ ~3.5mA

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