

MESSRS. : _____

AGENT : _____

**SPECIFICATION
of
PYRO INFRARED
MODULE**

MODEL NO. : SGM-5910
(RoHS compliant)


PART NO. : _____

* This product does not contain lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE) in more than the percentages specified by EU DIRECTIVE 2002/95/EC, except exemptions stated in EU DIRECTIVE 2002/95/EC ANNEX.

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APPROVED BY	CHECKED BY	DRAWN BY

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PART NO. :				

1. PRODUCT NAME

Passive Infrared Sensor Module with Fresnel Lens

2. MODEL NUMBER

SGM-5910

3. DIMENSIONS & DETECTION ZONE

See Fig. 1, 2

4. MODULE STRUCTURE

Nicera's passive infrared sensor, Fresnel lens and some electric components are mounted on PC board.

5. DETECTION AREA

NPN Transistor Open-Collector Output form (Active Low)

6. GENERAL DESCRIPTION

This module can detect infrared rays emanated from moving human body in a specific area.

7. ELECTRICAL CHARACTERISTICS


7-1 SENSITIVITY

This module is designed to detect a human body or similar heat source under below conditions.

Items.		Unit.	Notes.
Install height of module	1	meter	
Heat source temperature	3 to 5	degree C	From background
Moving speed of heat source	1.0	m/Sec.	
Direction of movement	90	degree	at central detection zones

7-2 MAXIMUM RATING

Items	Symbols	Min.	Typ.	Max.	Unit
Breakdown voltage				12	V _{DC}
Operating Temp.	T _{OPR}	-20	-	50	degree C
Storage Temp.	T _{STG}	-30	-	70	degree C

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7-3 ELECTRICAL CHARACTERISTICS

(at 25 degree C, V_{cc} = 5.0V if not specified otherwise)

Items.	Symbols	Min.	Typ.	Max.	Unit
Operating Voltage	V _{CC}	4.75	5	10	V _{DC}
Supply Current	I _{CC}	-	1	2	mA
Stabilized time of module	T _{ON}	-	15	30	Sec.

#1, After power supply starts, out put should not fix during above T_{ON}.

8. CAUTIONS

1. This module fundamentally detects a change of infrared energy.

This module does not only detect a moving human body but also other heat source similar to human temperature.

2. This module can't detect presence of human body if it does not move.

3. This module detects change of infrared rays through the Fresnel lens.

Detection areas and range depend on its surface condition.


4. To prevent malfunctions, operational failure or any deterioration of its characteristics, do not use this module in the following, or similar, conditions.

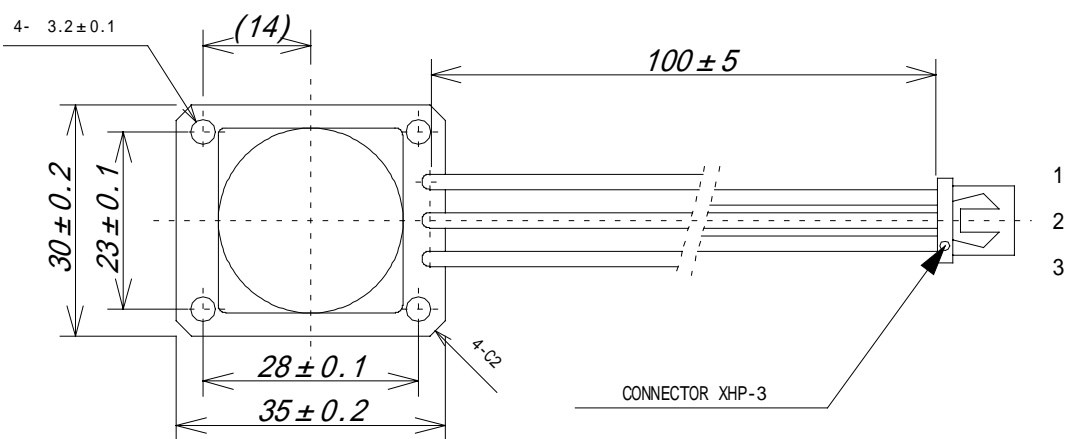
In rapid environmental temperature changes

In strong shock or vibration

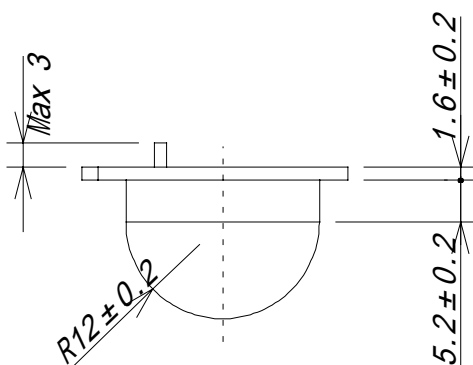
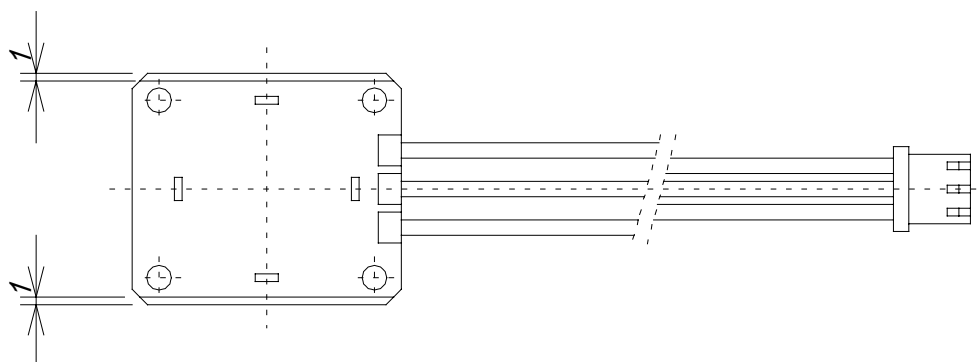
In high humidity and temperature

Unit troubles resulting from misuse, inappropriate handling or storage are not the manufacturer's responsibility.

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TOP VIEW


Connector No.	Cable color	Function
1	Black	GND
2	White	OUTPUT
3	Red	Power Supply

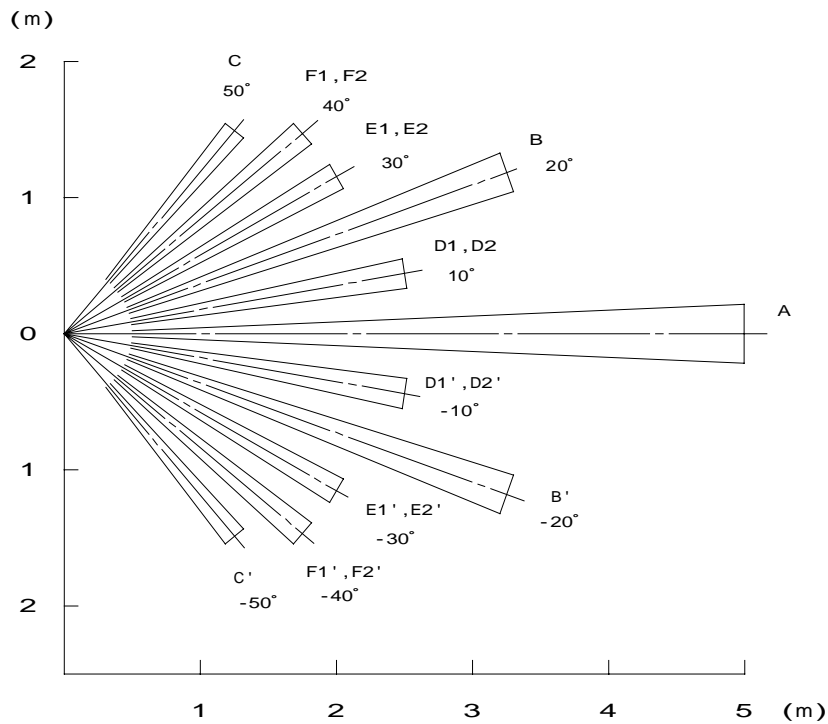
SIDE VIEW

BOTTOM VIEW


unit [mm]

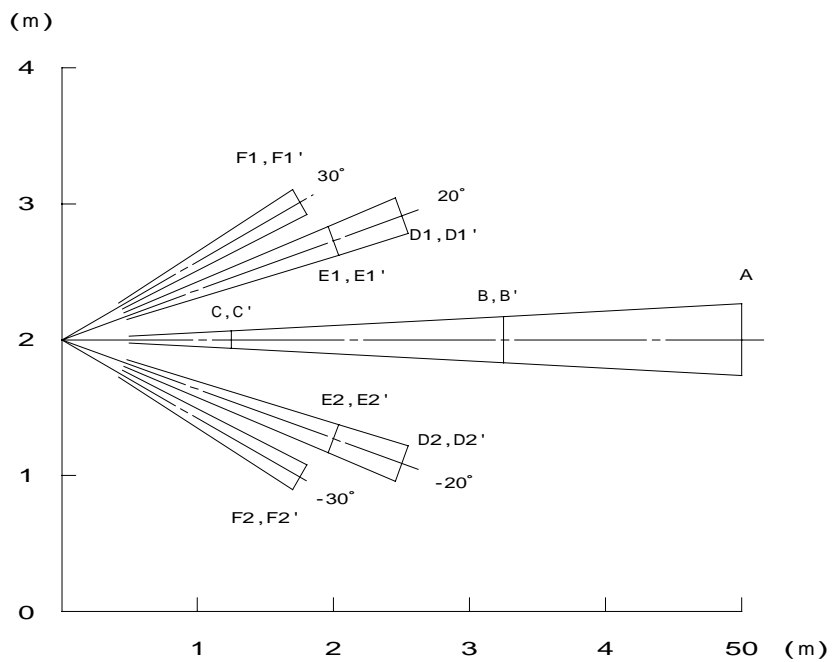
Fig.1

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DETECTION AREA



Horizontal



Vertical

Fig.2

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