

## 1. SMRD-24DH

Microwave Radar Dual Sensor Module(SMRD)

### 1.1 Definition

long range more then SMRD-24D Model

Can be distinguished in the direction of the moving object approaches/ apart.

## 2. Specification

### 2.1 General Specification

- 1) Transmit Frequency range : 24.05GHz~24.25 GHz
- 2) Operating Frequency : 24.125 GHz typ.
- 3) Supply Voltage : 4.75V~ 5.25V

### 2.2 Ambient Conditions

- 1) Operating temperature : -20 ~ +60 °C
- 2) Humidity(operation) : 0~80% RH

### 2.3 Absolute Maximum Ratings :

Parameter	Symbol	Rating	Unit
supply voltage	Vcc	5.5	V
operating temperature(out of spec)	Top	-40 / +85	°C
storage temperature	Tstg	+90	°C

### 2.4 Electrical Characteristics

Parameter	Min.	Typ.	Max.	Unit	Comment
<b>RF_Module</b>					
Transmit Frequency	24.05	24.125	24.25	GHz	
Temperature Drift Freq.		-1		MHz/°C	
Output Power		16		dBm	
Supply Voltage		5		V	
Supply Current		30	40	mA	
I/Q Balance (Amplitude)			6	dB	
I/Q Balance (Phase)	60	90	120	° (deg)	
IF-Output*		3±0.35		V	
Operating Temperature	-20		60	°C	
Outline Dimension	44 x 30 x 7			mm	
<b>Antenna</b>					
Antenna		45		° (deg)	Azimuth
Pattern(-3dB)		30		° (deg)	Elevation
Side Lobe		13		dB	Az. / El.

\* IF Output is manufacturer's condition, it will be possible to customized.

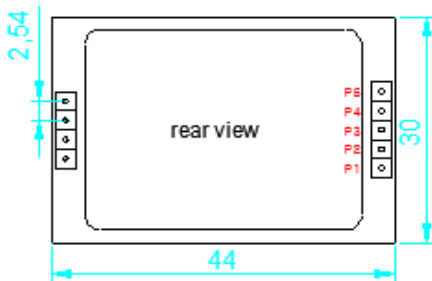
### 3. Interface

In/Out ports : 2.54mm pitch Pin-headers (Square pin  $\square$  0.64mm)

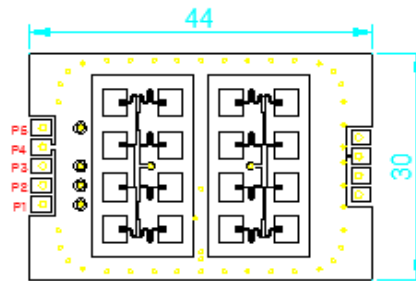
Pin #	Description	In/Out	Comment
1	NC		not connected
2	Vcc	input	supply voltage (+5 v)
3	IF1	output	signal 1 output
4	GND		GND
5	IF2	output	signal 2 output

### 4. Mechanical Outlines (unit : mm)

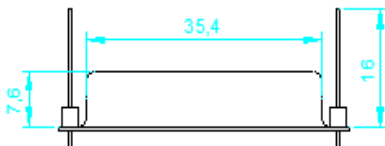
[ Rear view ]



[ Front view ]



[ Side view ]



## 5. Antenna Pattern Description

