



# AWM635RX( diversity antenna)

2.4GHz Video/Audio RF Module

## Description

Airwave 2.4GHz Audio/Video wireless RF module contains one Transmitter and one Receiver. Using of the most popular 2.4GHz ISM band and designed with high reliability. Airwave RF module is compliance with the criteria of FCC and R&TTE which can transmit/receive a wide band audio & video signals up to 300 feet in open area.

## Features

- Worldwide 2.4GHz ISM band
- Use diversity antenna function to overcome the multipath fading effect.
- Conform with R&TTE & FCC stipulation
- Compact size and low power consumption
- Highly efficient FM-FM modulation/demodulation scheme
- Compatible with both NTSC and PAL video formats
- Integrating Audio/Video input and output into one module baseband PCB
- No external Audio circuit needed
- Channel selection is four channel and default value is ch4 (not enable). Other channel can be selected by pulling low to enable.

## TECHNICAL SPECIFICATION

### General

Operation Frequency Range	2400 ~ 2483MHz
Channel Selection	PLL Synthesizer, 4ch. <sup>(1)</sup> (2414,2432,2450,2468MHz)
Video-Audio Modulation/Demodulation Type	FM-FM
Supply Voltage	DC + 5V (+/-2%)
Supply Current	170mA ~ 210mA
Operating Ambient Temperature	-10 ° C ~ +60 ° C

### Receiver

Input Signal Level Range	-85~-10dBm
<b>Video</b>	
Output Signal Level	1V <sub>P-P</sub> , typ. (+/-0.2Volt)
Frequency Response	+/-5 dB, max. 50Hz~5.5MHz
S/N Ratio (100KHz, 1V <sub>P-P</sub> Sine Wave)	40dB, min.
<b>Audio</b>	
Output Frequency Range	50Hz ~ 20KHz
Output Signal Level (Modulation Signal : 50Hz~15KHz Sine Wave)	3V <sub>P-P</sub> , typ. (+/-0.3Volt)

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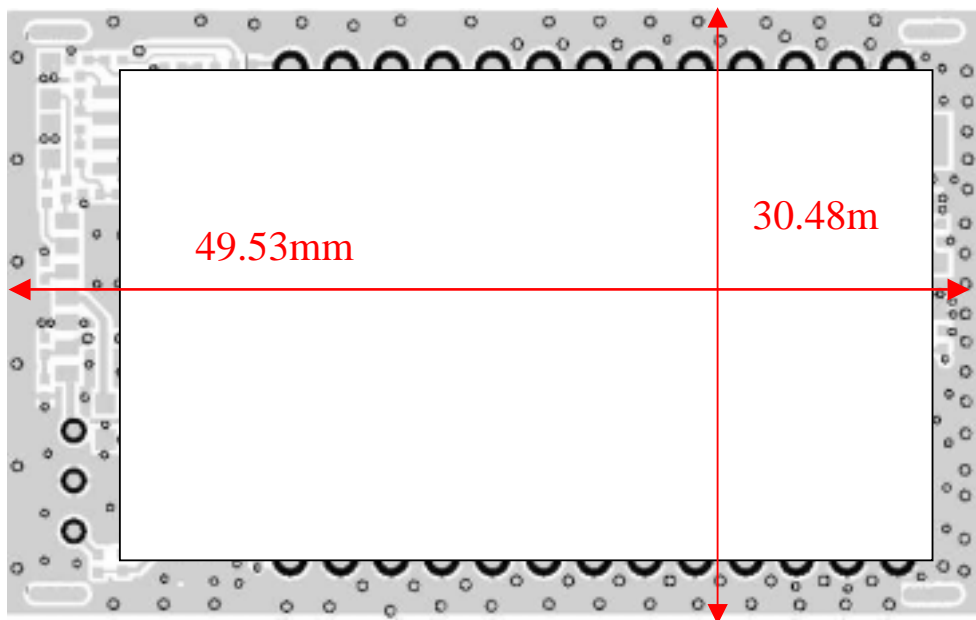
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Audio Frequency Response	50Hz ~ 15kHz (-3dB Bandwidth)
S/N Ratio (50Hz ~ 15KHz)	50dB, typ. (+/-3dB)

## Pin Description

26 25 24 23 22 21 20 19 18 17 16 15 14



13 12 11 10 9 8 7 6 5 4 3 2 1

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PIN	Function	PIN	Function
1	GND	14	GND
2	GND	15	BYPASS
3	RF IN 1	16	5V
4	GND	17	GND
5	GND	18	GND
6	GND	19	GND
7	GND	20	GND
8	RF IN 2	21	CH3
9	GND	22	CH2
10	GND	23	CH1
11	GND	24	VIDEO
12	GND	25	AUDIO-L
13	LED CONTROL	26	AUDIO-R

**NOTE:(1)**

LED CONTROL PIN output is high level for RF IN 1 off & RF IN2 on.

LED CONTROL PIN output is low level for RF IN 1 on & RF IN2 off.

**(2)**

Channel selection default value is ch 4.

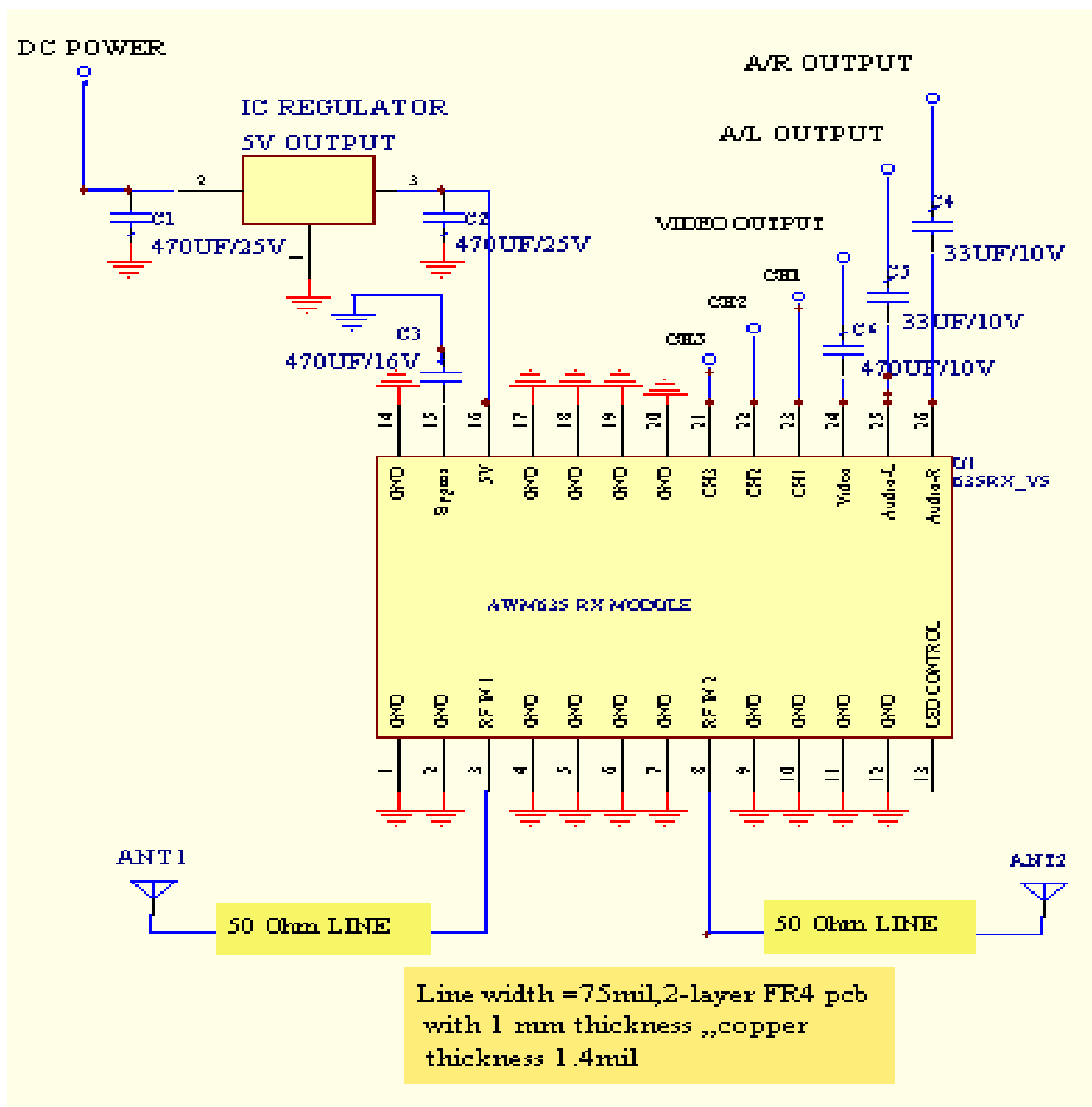
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## AWM635RX Module Application Circuit



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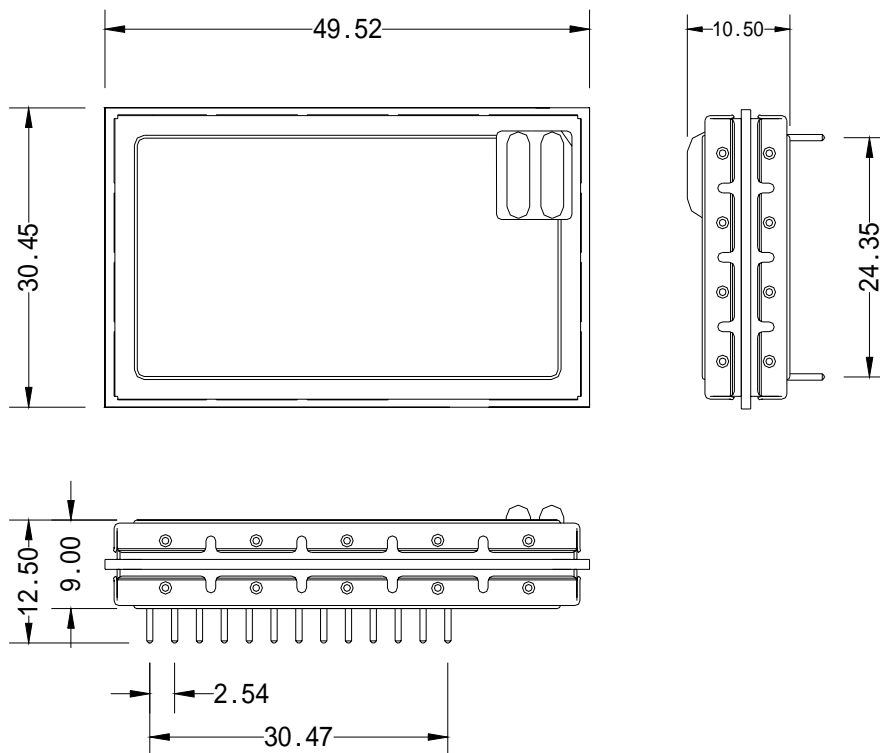


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## DIMENSION

### AWM635-RX(2-1)



Unit:mm Tolerance:± 0.3

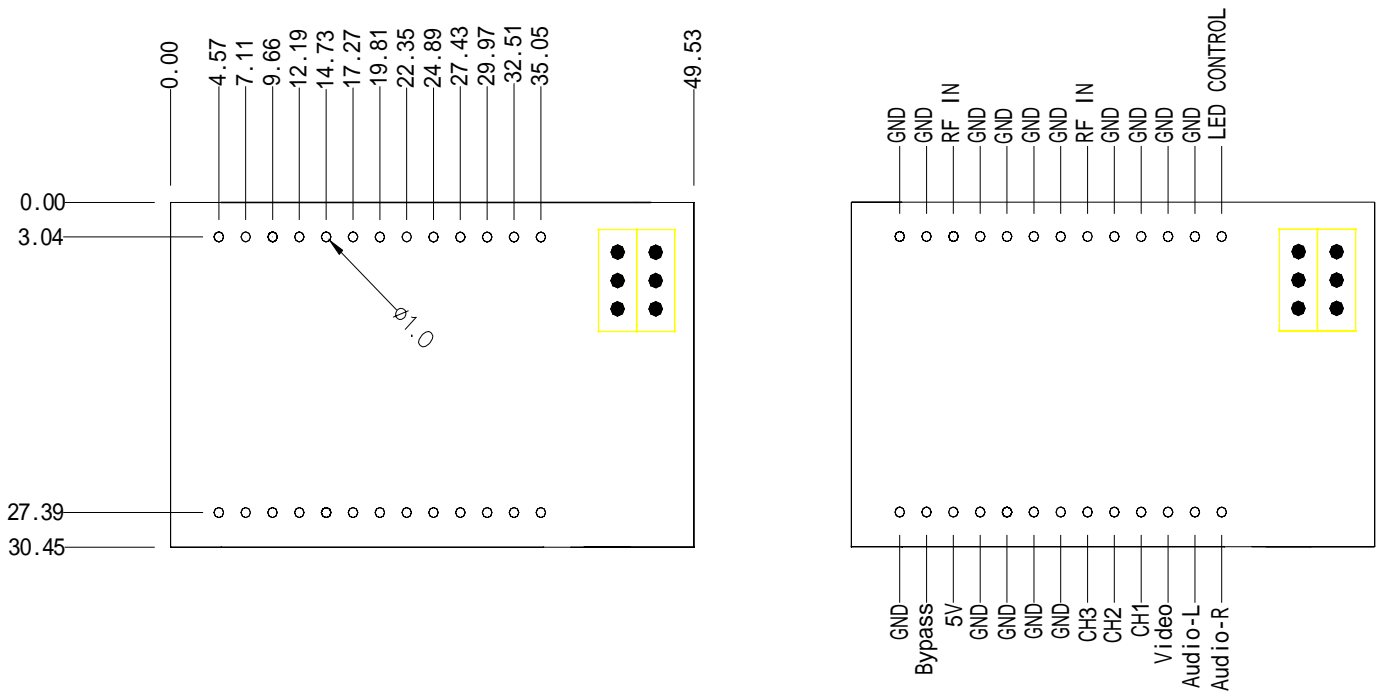
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# AWM635RX( diversity antenna)

2.4GHz Video/Audio RF Module

## AWM635-RX(2-2)



Unit:mm Tolerance:± 0.3

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