



专业无线影音传输产品制造商

广州品驰电子科技有限公司

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CUSTOMER: \_\_\_\_\_

PRODUCT : 2.4GHz 无线影音接收模块

MODEL NO: WAV-503RX

客户承認簽印 CUSTOMER APPROVED BY	核准 APPROVE	主管 CHIEF	承辦 RESPONSIBLE

# 1. SCOPE

The specification outlines the pertinent electrical requirement of the 2.4GHz ISM band wireless FM AV receiver which de-modulates the RF 2.4GHz FM signal into video and stereo audio signal for AV sender, baby monitor and surveillance application.

## 2. GENERAL

Item	Specification	Unit										
2-1. Receiver frequency  <b>Alternative channels are also available, pls contact</b> heqx8@126.com	<table border="1"> <thead> <tr> <th>Channel No.</th> <th>Receiver Frequency</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2414 MHz</td> </tr> <tr> <td>2</td> <td>2432 MHz</td> </tr> <tr> <td>3</td> <td>2450 MHz</td> </tr> <tr> <td>4</td> <td>2468 MHz</td> </tr> </tbody> </table> Channel selection by P1 connector	Channel No.	Receiver Frequency	1	2414 MHz	2	2432 MHz	3	2450 MHz	4	2468 MHz	
Channel No.	Receiver Frequency											
1	2414 MHz											
2	2432 MHz											
3	2450 MHz											
4	2468 MHz											
2-2. Supply voltage	5 ±0.5	VDC										
2-3. Consumption current	150	mA										
2-4. Operation temperature	-10~60	°C										
2-5. Storage temperature	-40~80	°C										
2-6. AV System	NTSC/PAL											
2-7 Stereo/Mono	Stereo											

## 3. Testing Condition

Item	Specification	Unit
3-1. Supply voltage	5	VDC
3-2. Temperature	25	°C
3-3. Humidity	80% or less	

#### 4. Electrical performance

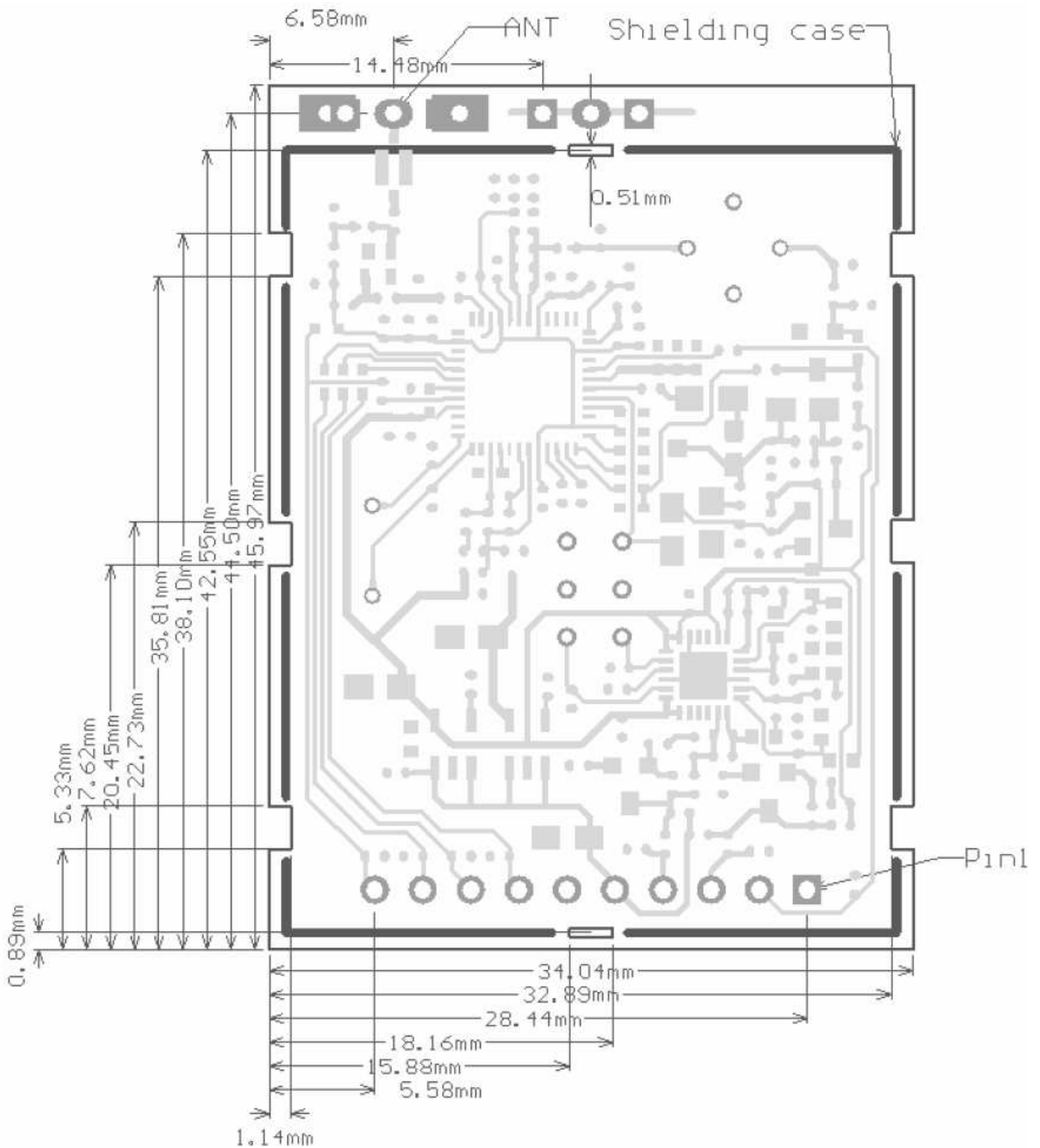
Item	Specification			Unit	Remark
	Min.	Typ	Max		
4-1. Receiver Sensitivity (50 $\Omega$ antenna port )		-87		dBm	SNR=42dB Fmod=15KHz
4-1. Video output signal Level	0.8	1	1.2	Vp-p	Video output loading 75 $\Omega$
4-3. Audio output signal Level	1.6	2	2.4	Vp-p	Video output loading > 2K $\Omega$
4-5 Audio sub-carrier		6 6.5		MHz	
4-6 Audio SNR	45	50	55	dB	Fmod= 1KHz emphasis/de-emphasis

#### 5. Pin Assignment

Pin No.	Contents	Parameter
1	GND	Output
2	Video output	Output
3	Audio output (6.5MHz Demodulation)	Output
4	Audio output (6MHz Demodulation)	Output
5	+5VDC	Input
6	GND	
7	Channel selection 0	Input
8	Channel selection 1	Input
9	Channel selection 2	Input
10	BX(connect GND for 2.4GHz band)	Input

## 7. Mechanical

### 7.1 PCB layout reference and mounting position

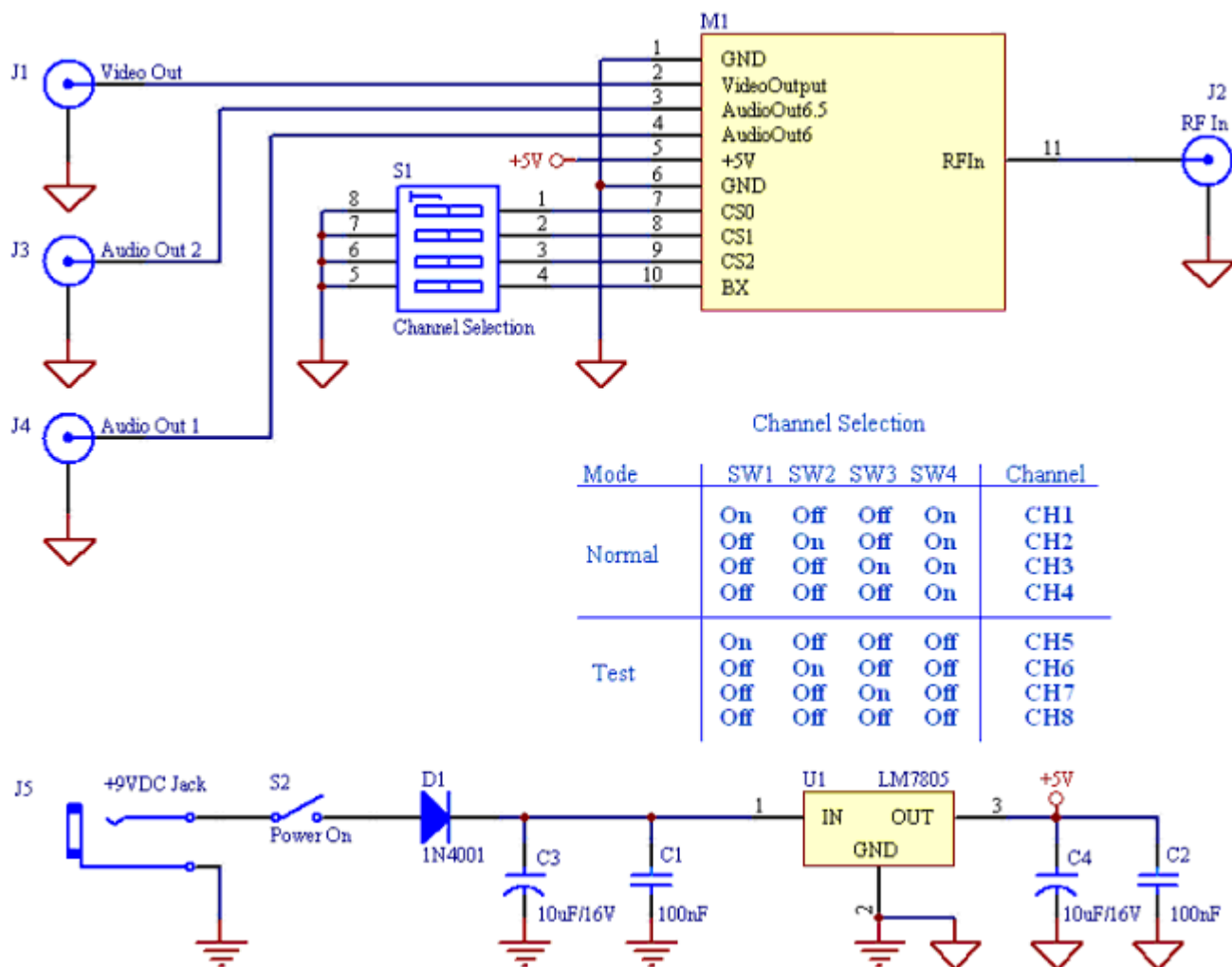


### 7.2 Module Dimension

**L x W: 45.97mm x 34.04mm**

## 8. Application Information

Application circuit for WAV-503RX module is referred to the following schematic. M1 port is used for mother board connection and pin definition is referred to section 5. Antenna is connected at PF IN port. CH1 to CH4 are selected by channel selection switch S1 shown in the following table, and +5V supply voltage have to be regulated by external regulator. +3.3V also is allowed, please contact [heqx8@126.com](mailto:heqx8@126.com)



Channel	Frequency (MHz)	MODE
CH1	2414	CS2,CS1: NC, BX,CS0: GND
CH2	2432	CS2,CS0: NC, BX,CS1: GND
CH3	2450	CS1,CS0: NC, BX,CS2: GND
CH4	2468	CS0,CS2,CS1: NC BX: GND
CH5	2490	CS0:GND, BX,CS2,CS1: NC
CH6	2510	CS1:GND, BX,CS2,CS0: NC
CH7	2390	CS2: GND, BX,CS1,CS0: NC
CH8	2370	BX,CS2,CS1,CS0: NC

