



Description

Airwave 5.8GHz Audio/Video wireless RF module contains one Transmitter and one Receiver. Using of the most popular 5.8GHz ISM band and being 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

- Use worldwide 5.8GHz ISM band
- Conform with R&TTE & FCC stipulation
- Design in compact size and low power consumption
- Reach highly efficient FM-FM modulation/demodulation scheme
- Be compatible with both NTSC and PAL video formats
- Integrate Audio/Video input and output onto one module base-band PCB
- Don't need external Audio circuit
- Provide with 7 selectable channels
- Set tack switch for channel selection

TECHNICAL SPECIFICATION

General

Operation Frequency Range	5725 ~ 5875MHz
Channel Selection	PLL Synthesizer, 7CH.
Channel Frequency	Ch1: 5740MHz, CH2: 5760MHz, CH3: 5780MHz, CH4: 5800MHz, CH5: 5820MHz, CH6: 5840MHz, CH7: 5860MHz
Video-Audio Modulation/Demodulation Type	FM-FM
Operating Ambient Temperature	0 ~ 70

Transmitter

Supply Voltage	DC + 5V (± 2%)
Supply Current	90mA, typ.
Output Power	12dBm ± 1dBm (CE) 0dBm ± 1dBm (FCC)

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5.8GHz Carrier Frequency Accuracy	±300KHz, typ.
Antenna Port Impedance	50
Video Input Impedance	75
Video Input Level	1V _{P-P} , typ.
Audio Input Level	1V _{P-P} , typ.

PIN DESCRIPTIONS

1	GND	
2	SW	Connect to external tack switch for CH selection
3	BIT2	see note
4	BIT1	
5	BIT0	
6	A_R	Audio Right CH Input
7	A_L	Audio Left CH Input
8	VIDEO	Video Input
9	VCC	DC 3.6 ~ 5 Volt In
10	BYPASS	Connect to external 470uF bypass capacitor

Note:

BIT2	BIT1	BIT0		
0	0	0	CH1	5740MHz
0	0	1	CH2	5760MHz
0	1	0	CH3	5780MHz
0	1	1	CH4	5800MHz
1	0	0	CH5	5820MHz
1	0	1	CH6	5840MHz
1	1	0	CH7	5860MHz

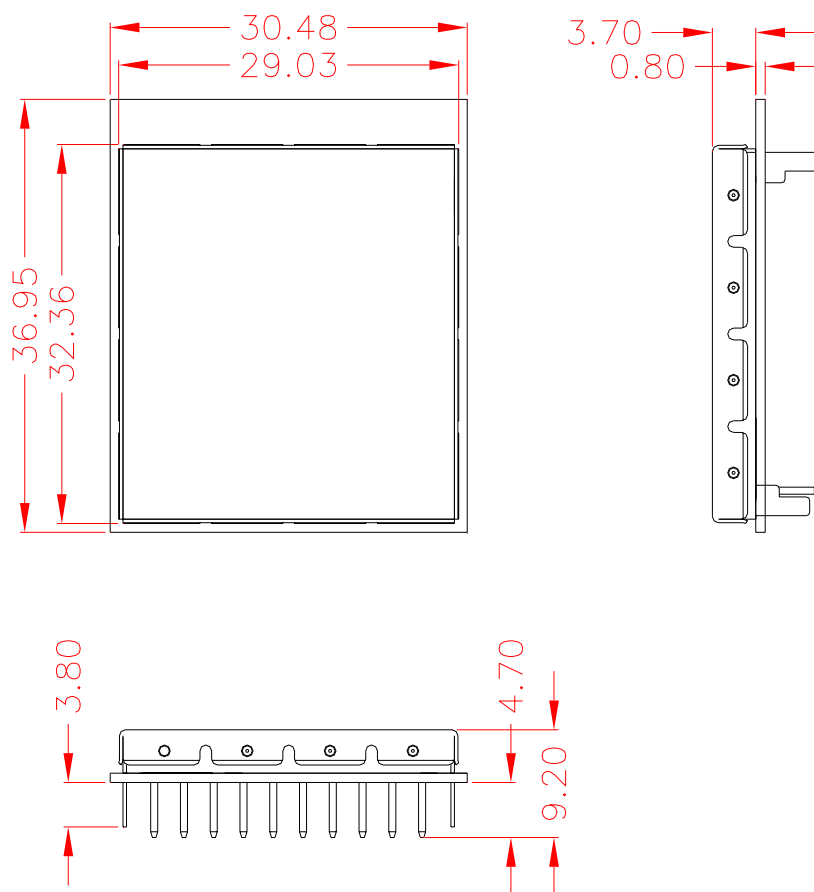
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AWM680TX

5.8GHz Video/Audio RF Module

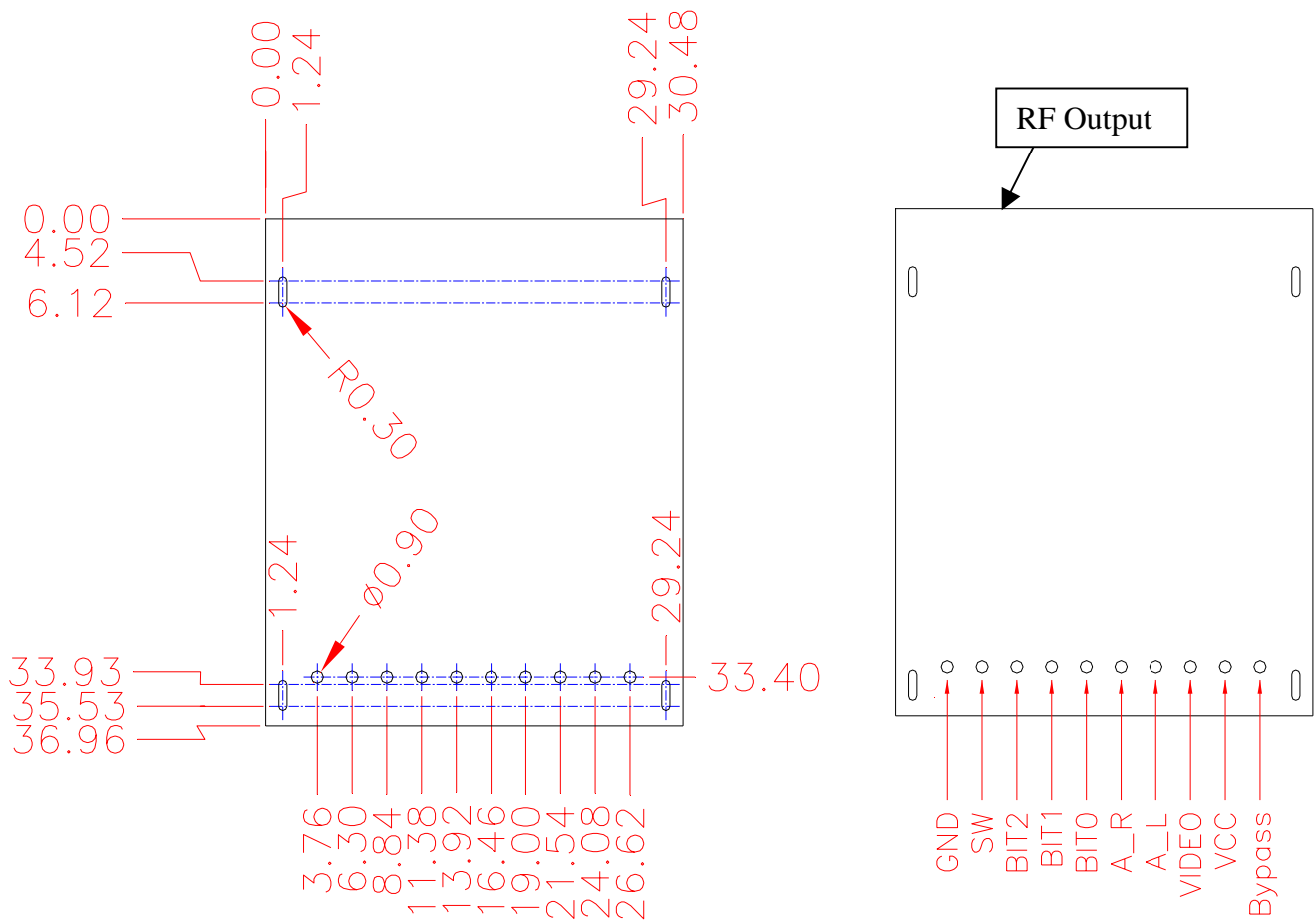
MODULE DIMENSION



Unit:mm Tolerance:±0.25

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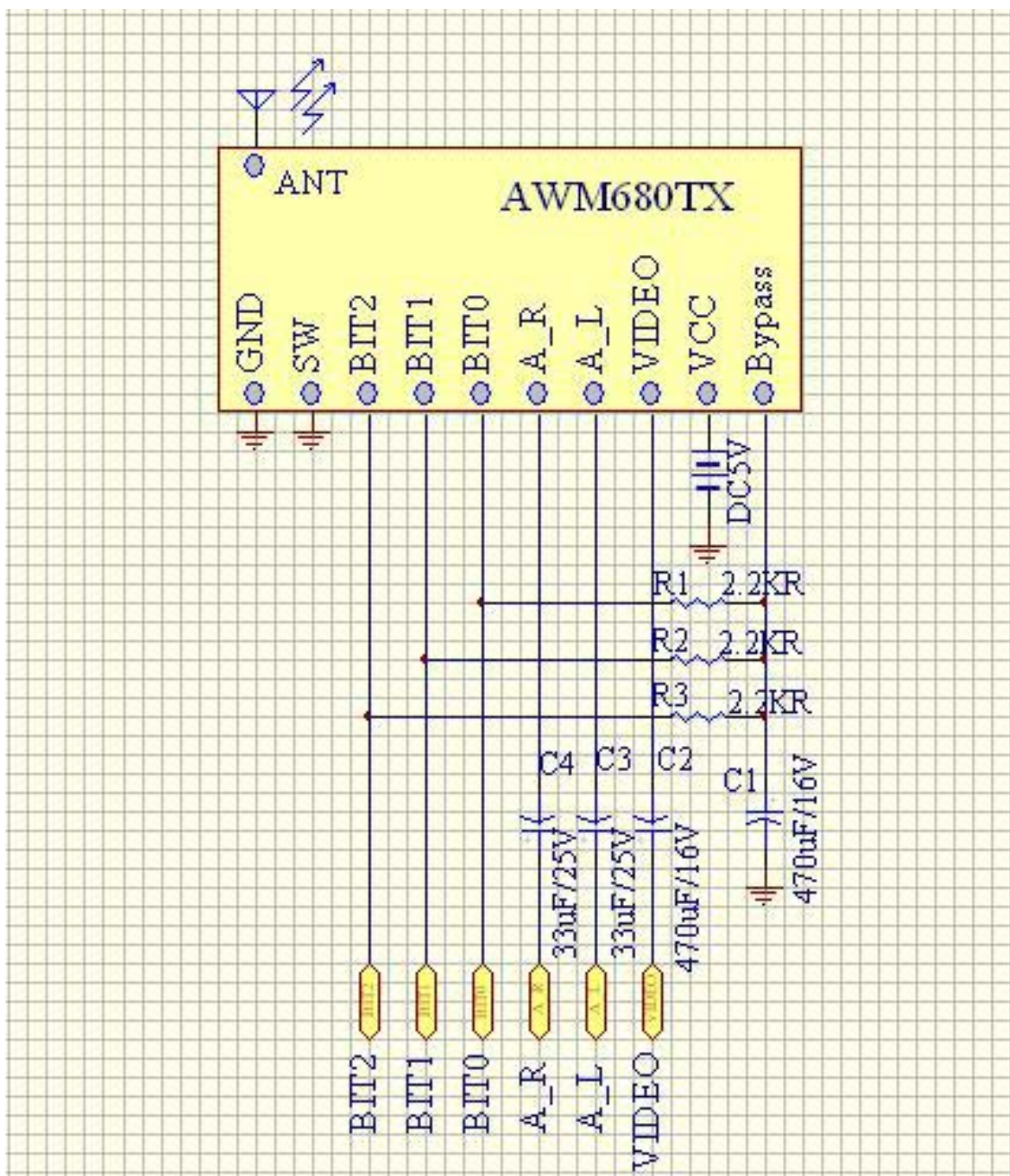
PCB Layout



Unit:mm Tolerance:±0.25

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AWM680 TX DIP SWITCH Module Application Circuit



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