AWM610/611/612 TX-LVD



2.4GHz Video RF Module

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The 2.4GHz audio-video Tx/Rx module, AWM61x, consists of a transmitter and a receiver module. The use of the most worldwide popular 2.4GHz ISM band and the design with high flexibility make AWM61x a very versatile device. It can simultaneously transmit / receive a wide band composite video and two audio signals up to 400 feet in distance. With the use of high gain directional antennas, its transmission range can go up to miles. The final products made of AWM61x can be easily adopted worldwide due to the compatibility with NTSC/PAL video format. In addition, the optional user pre-programmed micro allows the users to easily incorporate customized functions into their products.

Features

World-wide 2.4GHz ISM band.

Compliance with FCC and CE/BZT requirements.

High efficient FM-FM modulation/demodulation scheme.

Transmitting and receiving of wide band video and one audio subcarrier.

Compatibility with most composite video formats (NTSC, PAL, etc)

User specified RF transmitting power up to 100mW.

Optional user pre-programmed micro.

Applications

Wireless consumer electronics.

Wireless surveillance systems.

Local area audio-video broadcasting systems.

Wireless point-to-point transmission.

General Specifications:

Operation Frequency	2400~2483MHz
Channel Selection	PLL Synthesizer, 4 Channel
Supply Voltage	5V

CH1::2414MHz CH2::2432MHz CH3::2450MHz CH4:2468MHz

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RF:

Output Power	610 TX	611 TX	612 TX
_	0dBm / 10dBm	20dBm	27dBm
Supply current	26 / 40 mA	120mA	450mA
RF Port Impedance	50		

Video:

Input Impedance	75 , typ
Input Signal Level	$1V_{P-P}$, typ
Modulation (1V _{P-P})	±900KHz
Differential Gain	±5% max
Differential Phase	±5% Deg. max

Audio:

Input Impedance	10K , typ
Input Frequency Range	50Hz-20KHz
Input Signal Level	$3V_{P-P}$, max
Modulation(3V _{P-P})	±40KHz
Harmonic Distortion	1.5% max
S/N	50 dB min
Subcarrier Frequency	6.5MHz
Subcarrier Power Level	22 dBc ,typ

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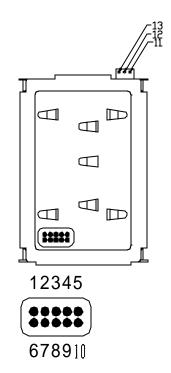


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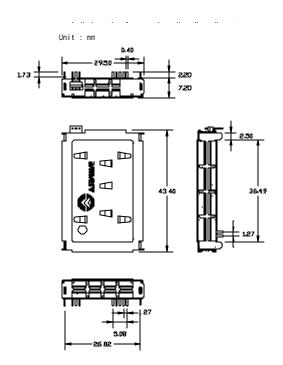
Pin Description

1	Video
2	5V
3	GND
4	Audio
5	N/A
6	N/A
7	CH1
8	CH2
9	СН3
10	CH4
11	GND
12	To Antenna
13	GND



PHYSICAL DIMENSIONS

Unit: mm



Α

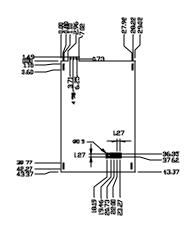
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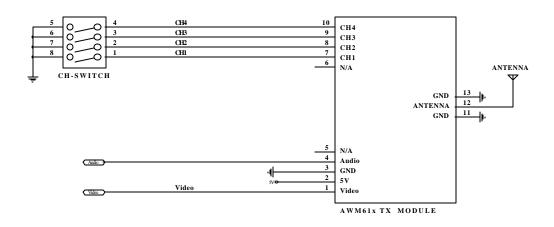
PCB Layout

PCB Layout : AWM61X TX-LVD





AWM61x TX Module Application Circuit



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