



# DATA SHEET



## AWM667TX 5.8GHz Transmitter Module

承認	品保	工程
Approve	QA	E/E



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### 1. Descriptions:

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 can transmit/receive a wide band audio & video signals up to 480m in open area.

**AWM667TX: 27dBm**

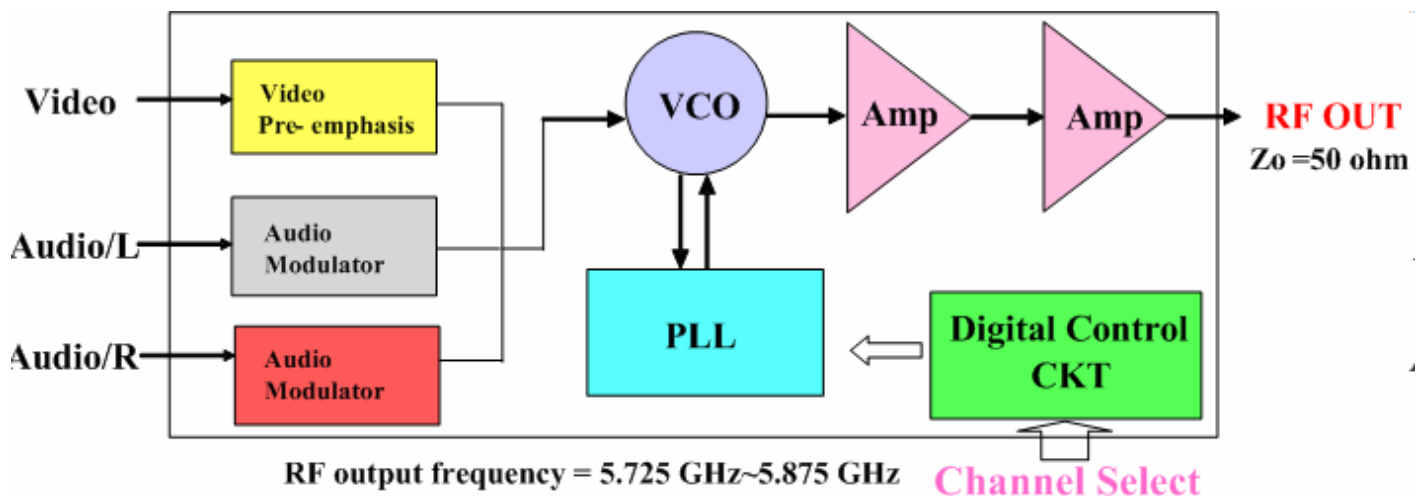
### 2. Feature:

- Use worldwide 5.8GHz ISM band
- 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

### 3. Application:

- AV Sender
- Baby monitor
- Surveillance
- Wireless Camera

### 4. Function block



### 5. PIN Define

Pin01 BIT2  
Pin02 BIT1  
Pin03 BIT0  
Pin04 A/R  
Pin05 A/L  
Pin06 Video  
Pin07 Vcc  
Pin08 Bypass  
Pin09 GND



RFout Pin10

### 6. PIN Descriptions

#### AWM667TX

PIN	NAME	Descriptions	PIN	NAME	Descriptions
01	BIT2	see note1	06	Video	Video Input
02	BIT1		07	VCC	DC +5V power supply in
03	BIT0		08	BYPASS	Bypass capacitor
04	A/R	Audio Right CH Input	09	GND	Ground
05	A/L	Audio Left CH Input	10	RFout	RF output

#### Note1:

Pin1	Pin2	Pin3	Descriptions	Frequency
BIT2	BIT1	BIT0		
0	0	0	Pin 1, Pin 2, Pin 3 connect to GND.	5740MHz (CH1)
0	0	1	Pin 1 and Pin 2 connect to GND, Pin 3 OPEN.	5760MHz (CH2)
0	1	0	Pin 1 and Pin 3 connect to GND, Pin 2 OPEN.	5780MHz (CH3)
0	1	1	Pin 1 connect to GND, Pin 2 and Pin 3 OPEN.	5800MHz (CH4)
1	0	0	Pin 2 and Pin 3 connect to GND, Pin 1 OPEN.	5820MHz (CH5)
1	0	1	Pin 2 connect to GND, Pin 1 and Pin 3 OPEN.	5840MHz (CH6)
1	1	0	Pin 3 connect to GND, Pin 1 and Pin 2 OPEN.	5860MHz (CH7)
1	1	1	Pin 1, Pin 2, Pin 3 OPEN.	5860MHz (CH7)



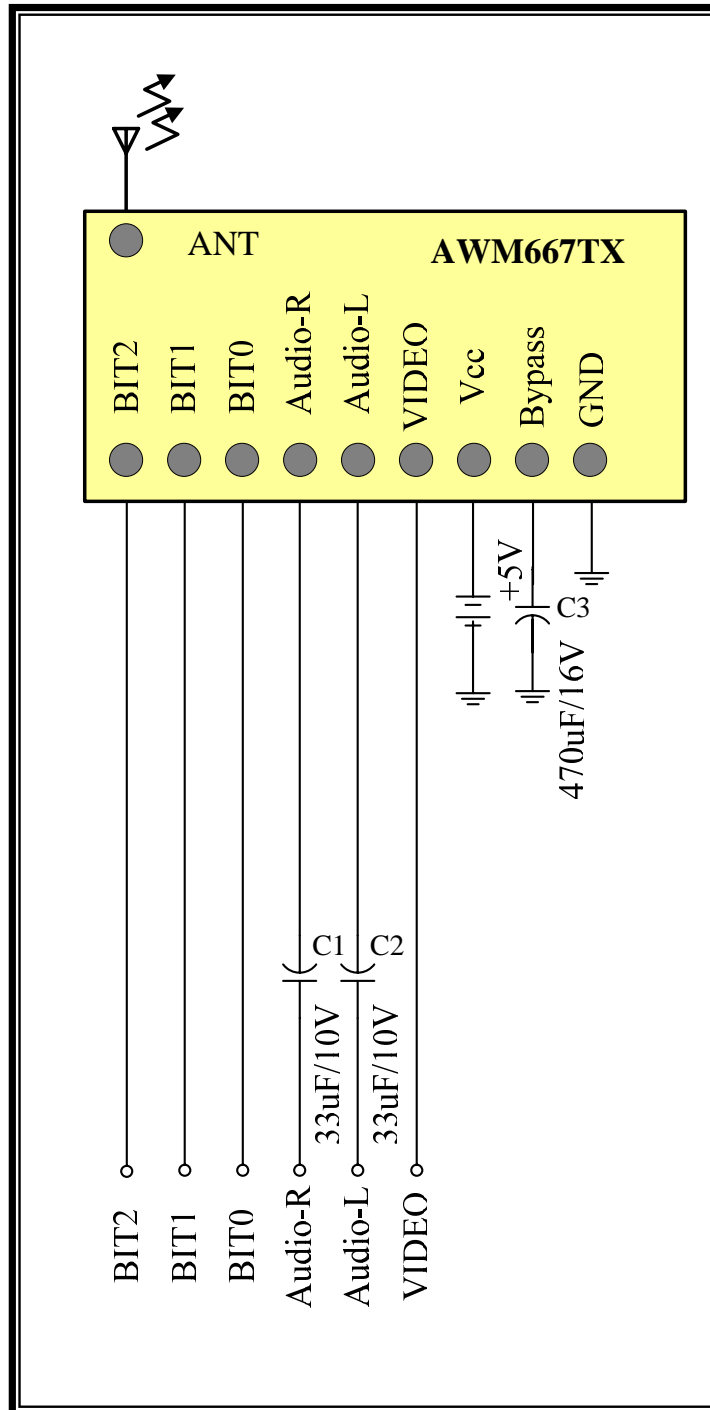
**7. Absolute Maximum Ratings**

Parameters	Model.	Min.	Typ.	Max.	Unit
Storage Temperature Range	AWM667TX	-40	-	85	°C
Supply voltage	AWM667TX	-0.5	-	5.5	V

**8. DC/AC Electrical characteristic:**

RF/ DC Parameters		Min.	Typ.	Max.	Unit
Supply voltage (DC)	AWM667TX	+4.8		+5.2	V
Supply current	AWM667TX	550	675	800	mA
RF output power	AWM667TX	26	27	28	dBm
<b>Contain of Heat Sink (Temperature 25°C)</b>					
Operating temperature		-10		50	°C
Carrier to Subcarrier Ratio	AWM667TX	25		29	dBc
RF Deviation- Video (Input 10KHz, 1Vpp)	AWM667TX		3.9		MHz
RF Deviation- Audio (Input 1KHz, 1.5Vpp)	AWM667TX	R	70		kHz
		L	70		
Antenna Port Impedance			50		Ohm
5.8GHz Carrier Frequency Accuracy			±300		kHz
Audio subcarrier frequency	left	6MHz			
	right	6.5MHz			
Operation Frequency Range		5725		5875	MHz
Channel Selection		PLL Synthesizer, 7CH (See Tab11)			
Channel Frequency		Ch1=5740, CH2=5760, CH3=5780 Ch4=5800, CH5=5820, CH6=5840 Ch7=5860			
Video-Audio Modulation/Demodulation Type		FM-FM			

### 9. Test circuit:





## 10. Test circuit TBD

### AWM667TX Demo Board DIP SW

Component	Quantity	Designator
E/CAP 33UF, 4*7 10V,SS010M0033SBT(LF)	2	C1,C2
E/CAP 470uF, 8*11 16V	2	C3,C4
E/CAP 1000uF, 10*15 16V	1	C5
DIODES 1N4001, 1A/100V	1	D1
LED 紅色圓 MO34PD, SH-031-RR-L	1	D2
L7805CV Regulator	1	IC1
RCA PIN JACK 紅白黃, RCA-316	1	JACK3
DC POWER JACK(LF), DS-210B 5.5mm	2	JACK1, JACK2
DIP RESISTOR 0R, ±5% 1/4W (LF)	5	R1,R2,R3,R4,L1
DIP RESISTOR 680R, ±5% 1/4W (LF)	1	R6
DIP SWITCH 指撥開關, DPL-04-V (LF)	1	SW1
Heat Sink, 23.4*16.8*19(7805 用)	1	M1



## 11. Dimension:

