

AKIHABARA INC.

PRODUCT SPECIFICATION

PRODUCT: 5.8GHz A/V Tx Module

MODEL NO.: MAV-58T2703

DATE: 2009.07.20

Customer (): _____

Approved (): _____

1. General

1.1 Operation Frequency Range	5635 ~ 5955 MHz	
1.2 Channel Selection	CH1 : 5733 MHz	CH1' : 5705 MHz
(PLL Synthesizer, 8 CH)	CH2 : 5752 MHz	CH2' : 5685 MHz
	CH3 : 5771 MHz	CH3' : 5665 MHz
	CH4 : 5790 MHz	CH4' : 5645 MHz
CH5	: 5809 MHz	CH5' : 5885 MHz
CH6	: 5828 MHz	CH6' : 5905 MHz
CH7	: 5847 MHz	CH7' : 5925 MHz
CH8	: 5866 MHz	CH8' : 5945 MHz
1.3 Video Modulation / Demod.	FM	
1.4 Audio Modulation / Demod.	FM-FM	
1.5 RF Antenna Port Impedance	50 Ω	

2. Mechanical Specification

Please refer to Figure 8

3. Environmental Specification

3.1 Temperature -10 °C ~ +60 °C

4. Test Condition

- 4.1 Supply Voltage: 5V
- 4.2 Ambient temperature: 25°C
- 4.3 Video input voltage: 1.0 Vp-p, typ.
- 4.4 Audio input voltage: 3.0 Vp-p, max.

5. Electrical Characteristics

No.	Item	Specifications			Unit	Test Condition
		Min.	Typ.	Max.		

5.1 DC Characteristics						
1	Supply Voltage	4.9	5	5.1	VDC	
2	Current Consumption	730	900	mA		

5.2 Video Characteristics						
1	Input Impedance	75	Ω			
2	Input Level		1	Vp-p		

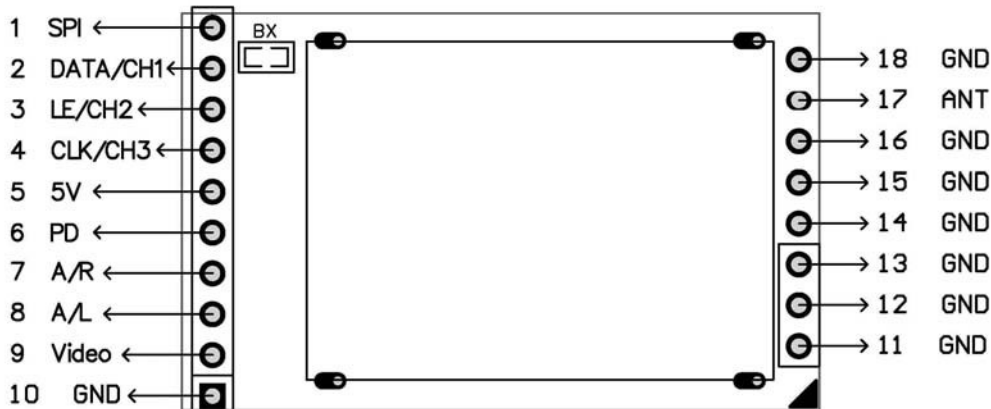
5.3 Audio Characteristics					
1	Input Impedance		10		KΩ
2	Input Level			3.0 V _{p-p}	

5.4 Output Characteristic (TX/RF)					
1	TX Power	26	27	29.5	dBm
2	Audio Sub-carrier Level		27		dBc
3	Audio Sub-carrier (L Channel)	6.0	MHz		
3	Audio Sub-carrier (R Channel)	6.5	MHz		

6. Pin Assignment

Pin No.	Pin Name	Pin No.	Pin Name
1	SPI_SE	10	GND
2	CH1/SPI_DATA	11	GND
3	CH2/SPI_LE	12	GND
4	CH3/SPI_CLK	13	GND
5	5V	14	GND
6	PD	15	GND
7	A/R	16	GND
8	A/L	17	ANT
9	Video	18	GND

5.8GHz TX MOD Pin Assignment



7. Channel Selection

(When BX ON - tie to GND)

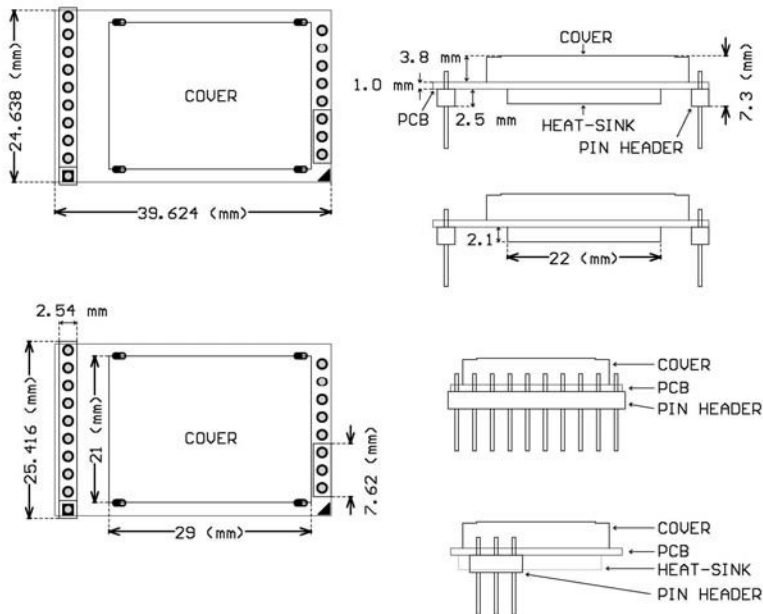
Transmission Frequency	Contents
CH1 : 5733 MHz	PIN 2, PIN 3 and PIN 4 open
CH2 : 5752 MHz	PIN 2 tie to GND, PIN 3 and PIN 4 open
CH3 : 5771 MHz	PIN 3 tie to GND, PIN 2 and PIN 4 open
CH4 : 5790 MHz	PIN 2, PIN 3 tie to GND, PIN 4 open
CH5 : 5809 MHz	PIN 4 tie to GND, PIN 2 and PIN 3 open
CH6 : 5828 MHz	PIN 2, PIN 4 tie to GND, PIN 3 open
CH7 : 5847 MHz	PIN 3, PIN 4 tie to GND, PIN 2 open
CH8 : 5866 MHz	PIN 2, PIN 3 and PIN 4 tie to GND

(When BX OFF - OPEN)

Transmission Frequency	Contents
CH1' : 5705 MHz	PIN 2, PIN 3 and PIN 4 open
CH2' : 5685 MHz	PIN 2 tie to GND, PIN 3 and PIN 4 open
CH3' : 5665 MHz	PIN 3 tie to GND, PIN 2 and PIN 4 open
CH4' : 5645 MHz	PIN 2, PIN 3 tie to GND, PIN 4 open
CH5' : 5885 MHz	PIN 4 tie to GND, PIN 2 and PIN 3 open
CH6' : 5905 MHz	PIN 2, PIN 4 tie to GND, PIN 3 open
CH7' : 5925 MHz	PIN 3, PIN 4 tie to GND, PIN 2 open
CH8' : 5945 MHz	PIN 2, PIN 3 and PIN 4 tie to GND

8. Dimension

5.8GHz TX MOD



9. Application CKT

