

深圳 市天眷 科技 有 限 公 司

**SHENZHEN TIANJUAN TECH.CO.,LTD**

深圳市南山区东滨路 339 号城市山林 3-4D

电话：86-755-86280353 转 606; 82159675

手机：13026625520

传真：86-755-86195311

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## 产 品 规 格 书

### **SPECIFICATION FOR PRODUCT**

客 户

**CLIENT**

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品 名

**TJ-102BC (CPU 为 TEA5767)**

**PARTNAME**

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规 格

**11.2X11.2X1.9**

**SPECIFICATION**

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厂 商

深圳市天眷科技有限公司

**VENDOR**

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承认日期

**APPROVED DATE**

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审 批	拟 制

确 认

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## FM STEREO TUNER MODULE

### TJ-102BC

**(IIC/3 Wire Mode selectable)**  
**(IC Philips TEA5767HN)**

- FM 76 to 108MHz
- Automatic search tuning function
- High sensitivity ,Low noise
- Low\_power
- Mini size

## ENVIRONMENT TEST

### 1) TEMPERATURE TEST

After the tuner shall be exposed for each 120 minutes in a test chamber of temperature cycle at  $20^{\circ}\text{C}, 40^{\circ}\text{C}, 0^{\circ}\text{C}, 20^{\circ}\text{C}$  and then the tuner shall be operated satisfactorily electrical performance.

### 2) TEMPERATURE SHOCK TEST

After 12 hours exposure in a test chamber at  $50^{\circ}\text{C} \pm 2^{\circ}\text{C}$  or  $-10^{\circ}\text{C} \pm 2^{\circ}\text{C}$  and then exposed in a room temperature for more than 4 hours, the tuner shall be operate satisfactorily.

### 3) HUMIDITY TEST

After 5 hours exposure in a test chamber at  $40^{\circ}\text{C} \pm 5^{\circ}\text{C}$  and  $90 \pm 5\%$  R.H., then exposed for 4 hours in a room temperature, there shall be no deterioration in electrical performance.

In addition, the gain variation shall be less than 3dB and frequency drift shall be less than 500 kHz.

### 4) VIBRATION TEST

At condition, amplitude and oscillation shall be 2mm and 1,000 C.P.M. respectively. There shall be no looseness after each 2 hours of top-bottom back-forth and right-left vibrations.

After this test the gain variation shall be less than 3dB and frequency drift shall be less than 200 kHz.

### 5) DROP TEST

After the packed tuner at 50cm height is dropped six times from each side , gain variation shall be less than 3dB and frequency drift shall be less than 200 kHz.

### 6) OPERATING TEMPERATURE TEST

After 60 seconds reflow soldering at  $250^{\circ}\text{C} \pm 5^{\circ}\text{C}$ , the tuner shall be operate satisfactorily.

This specification applied to FM STEREO tuner Module.

## 2. General specification

NO	ITEM	SPEC	NOTE
1	Frequency Range	87.5(76) – 108MHz	
2	IF Frequency	225KHz	Upper heterodyne
3	RF input impedance	75Ω	Unbalance
4	Supply Voltage	3V	
5	Operating temperature	-10 -55°C	
6	Humidity	85% MAX	
7	Clock (X-TAL)	32.768KHz	

## 3. Electrical specification

NO	ITEM	Test condition	SPEC			
			MIN	TYP	MAX	UNIT
1	Sensitivity (S/N 30dB)	90.0MHz		6	9	dB
		98.0MHz		6	9	dB
		106MHz		6	9	dB

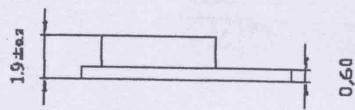
2	S/N Ratio	40KHz	55	60	-	dB
3	Image rejection	87.5~108MHz	25	30	-	dB
4	Stereo separation	$\Delta f$ 75Khz fmod=1KHz	25	30	-	dB
5	Audio output	$\Delta f$ 22.5Khz fmod=1KHz		80		mv
6	T.H.D	$\Delta f$ 75Khz fmod=1KHz		0.5	1.5	%

4. Standard test condition

NO	ITEM	MONO	STEREO		
1	Modulation Frequency	1KHz 22.5KHz /dev $V_{RF}$ =1mV	1KHz, 75KHz/dev including 10% pilot		
2	Test Frequency	98MHz			
3	RF Input level	60dBuv			

5. DC Specification

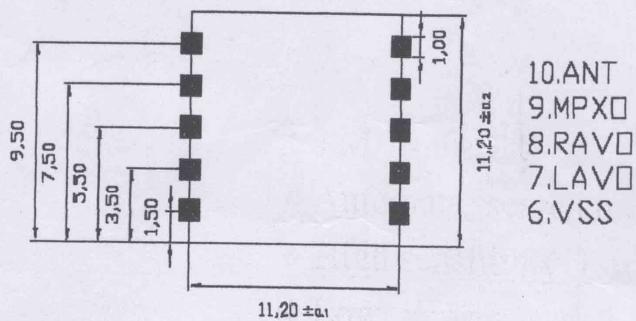
ITEM	Test condition	SPEC			
		MIN	TYP	MAX	UNIT
Supply Voltage	ON Station	2.5	3.0	5	V
Supply Current	ON Station	8.5	10	13	mA



TJ-102BC

(TOP VIEW)

1.DATA  
2.CLK  
3.BUSMODE  
4.W/R  
5.VDD



TJ-102BC 規格圖