
FM Digital Tuner**FM 数字调谐器****QM-5767-F00****FM TUNER**

一、Applications Scope:

- ⊙ MP3, MP4 players
- ⊙ Portable radios
- ⊙ USB FM radio
- ⊙ Digital sound
- ⊙ GPS, PDAs
- ⊙ Consumer electronics

二、Function Characteristic:

- FM 70 to 108MHz
- Automatic search tuning function
- Fully digital processing, include audio output
- I2C-bus, only requires a minimum
- Low power , Mini size and low-cost
- High sensitivity , Low noise
- Integrated LDO regulator
- Bass boost

三. Electrical characteristic**1. General specification**

NO	ITEM	SPEC	NOTE
1	Frequency Range	70 - 108MHz	
2	Clock (X-TAL)	32.768KHZ	TYP
3	Operating temperature	-20 - 65℃	
4	Humidity	85%	MAX
5	Vesd (discharge Voltage)	2000V	MAX

2.DC Specification

NO	ITEM	Test condition	SPEC			
			MIN	TYP	MAX	UNIT
1	Supply Voltage	ON Station	2.8	3.3	5.0	V
2	Supply Current	ON Station	---	23	26	mA
3	Supply Current	Standby	---	45	50	uA

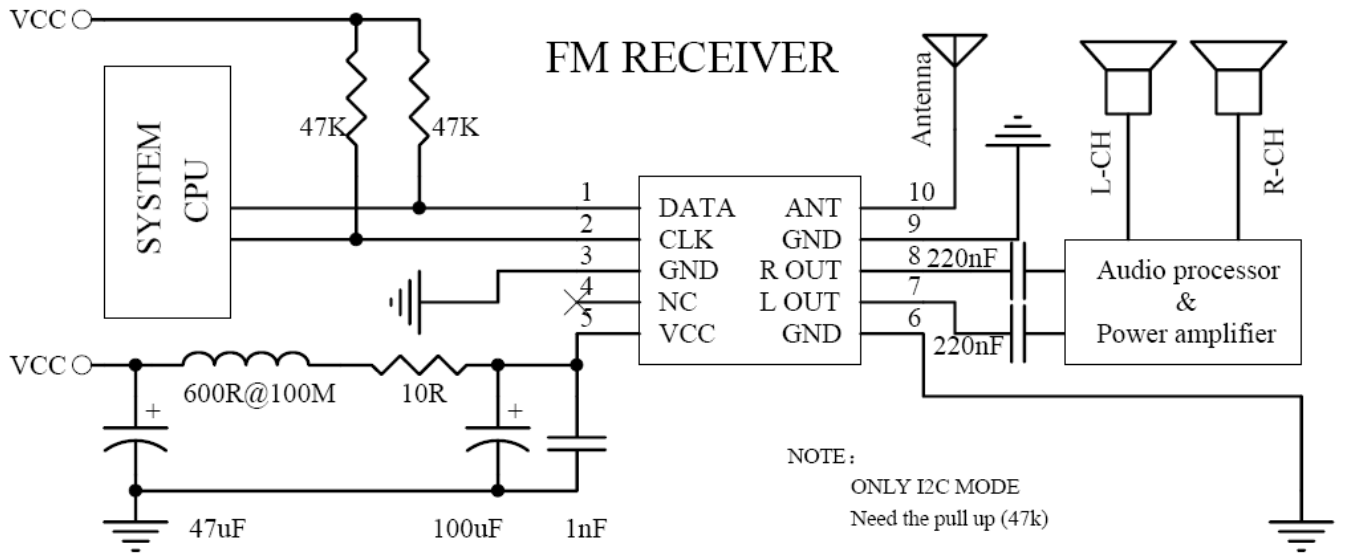
3. Electrical specification

NO	ITEM	Test condition	SPEC			
			MIN	TYP	MAX	UNIT
1	RF input impedance	input resistance at pins RFI1 and RFI2 to RFGND		120		Ω
2	RF sensitivity input voltage	76-108 MHz; fmod = 1 kHz; (S+N)/N = 26 dB Mono=on	8	10	12	dBuV
3	AM Suppression	V _{RF} =60dBuV FM: fdev=22.5kHz fmod=1KHz; AM:m=0.3;		50		dB
4	SNR	V _{RF} =60dBuV; F _{tune} =70-108MHz fdev=75kHz; fmod=1KHz	52	56	60	dB
5	Stereo separation	Δf 45Khz fmod=1KHz	20	30	33	dB
6	Audio output	Δf 22.5Khz fmod=1KHz		80		mV
7	THD	Δf 75Khz fmod=1KHz	---	0.05	0.1	%

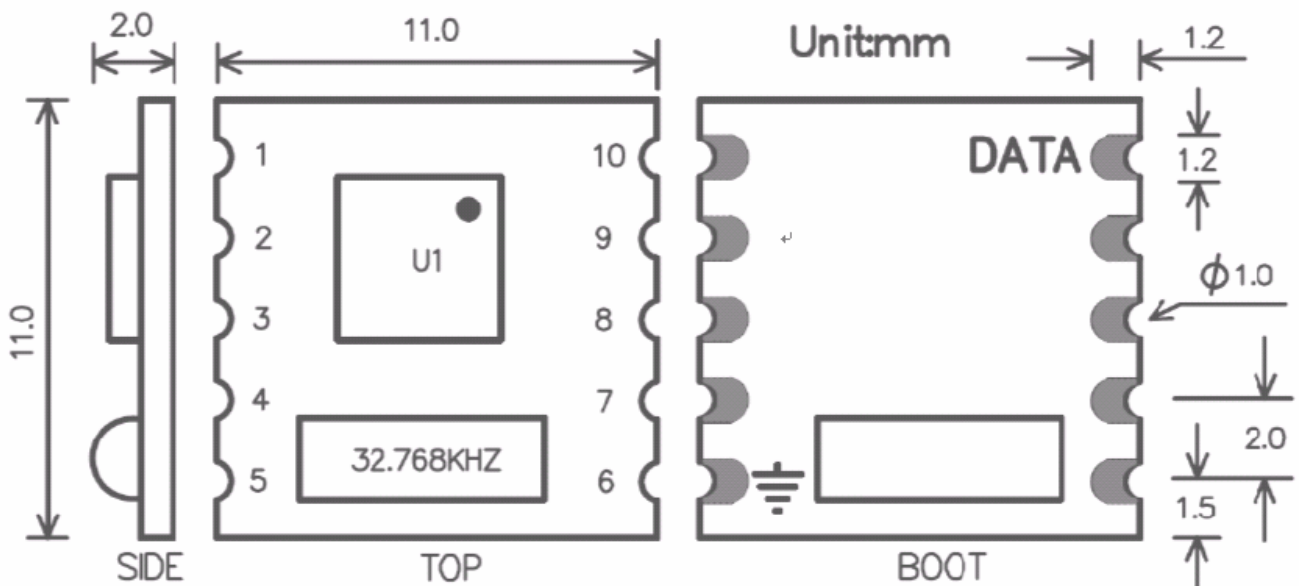
四. Pin Description

PINS	NAME	I/O	DESCRIPTION
1	DATA	I/O	Bus data line input/output
2	CLK	I	Bus clock line input
3	GND	-	Ground
4	NC	-	NOT connected
5	VCC	-	Voltage supply
6	GND	-	Ground
7	L-OUT	O	Audio left channel output
8	R-OUT	O	Audio right channel output
9	GND	-	Ground
10	ANT	I	RF Input line (Connect to Antenna)

五. Applications circuit:



六. PCB Application Size:

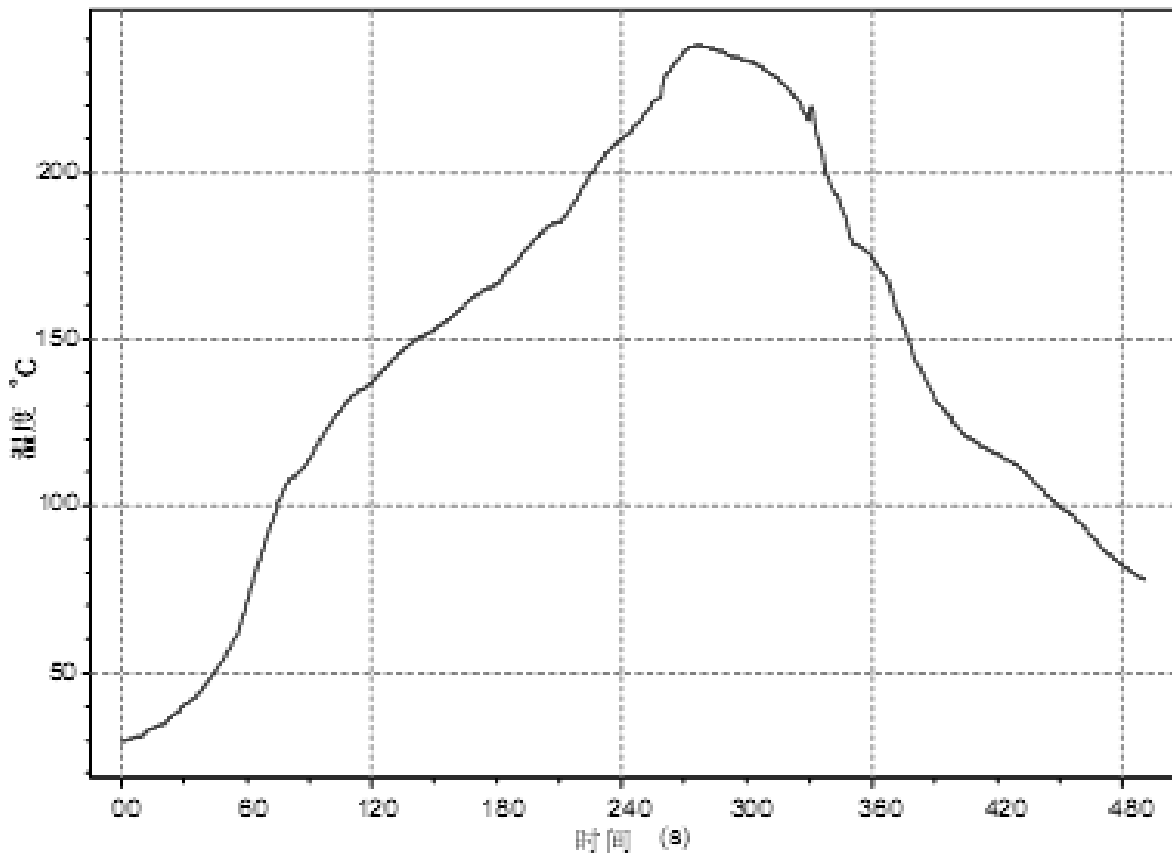


七. PCB Layout note:

- * Please advert copper & trace of ANT part shall be short and wide ASAP .
- * Keep ANT part far away from noise source. * Keep POWER part(VCC,GND) copper & trace shall be wide and short ASAP ,and far away from noise source. FM GND shall grounding clear GND.

八. Reflow profile

ROHS Graph:



NOTE: MAX Temp 250 °C (ROHS) ,Temperature maintained about 220 °C (50—60sec)
