

Datenblatt

RBS11936 Stereo Radio FM Empfänger Modul TJ-FL102BC-V1.5

Product Introduction

F-102BC-QN-AF Stereo FM radio module is an FM stereo radio module developed and produced by the latest FM chip of SI4702. It has the advantages of small size, low power consumption, high receiving sensitivity, good intermediate frequency selectivity, universal I C bus control, no debugging, few external components, and extremely low noise. It is an easy-to-use and cost-effective single-chip FM stereo radio module. Applicable to MP3, MP4, FM radio, digital photo frame, multimedia audio and other devices.

Product Features

1. The chip adopts advanced COMS technology and its performance is stable and reliable.
2. High sensitivity, low noise, strong anti-interference ability and few external components.
3. Use the advanced SEEK hardware search method to quickly find the radio.
- 4, I C serial data bus interface communication.
- 5, built-in LDO adjustment, low power consumption, ultra-wide voltage range (2.7-5.0VDC).
6. The software controls the built-in power amplifier circuit, which can output 1000mV audio power ($R = 32\Omega$).
- 7, built-in noise cancellation, soft mute, bass enhanced circuit design.
- 8, with FM stereo function.

Product Parameters

Working conditions:

		Test Value			Unit	Test Conditions	
		Min	standard	Max			
Input frequency range	Ffm	76	/	108	MHz		
Receiving sensitivity	Sen	/	2.0	/	uV	Fdev=22.5KHz Fmod=1KHz Sinad=26Db 90MHz/106MHz	EMF
Stereo resolution	Sep		40		dB	VRF=60dBuVL-R/R-L 10%Pilot Fdev=22.5KHz Fmod=1KHz	
Distortion	THD	—	0.1	/	%	VRF=60dBuV Fdev=75KHz Fmod=1KHz	
Signal to noise ratio	S/N:		60		dB	VRF=60dBuV Fdev=22.5KHz Fmod=1KHz	
Audio channel imbalance	GV	/	1	/	dB	Vin=60dBuV L+R	
Audio output voltage	Vaudio	/	1000	/	mV		

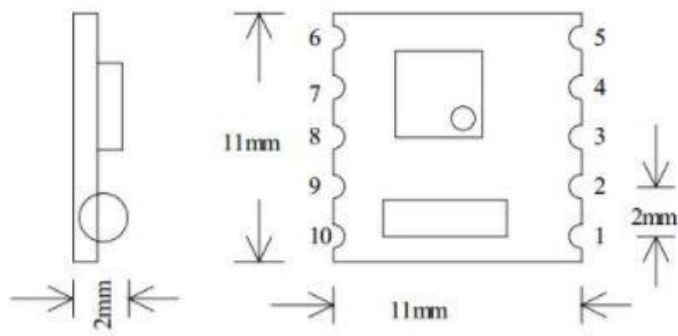
The scope of work

	Express compliance	Value (range)	Unit	
Operating supply voltage range	Vcc	2.7—5.0	VDC	
Range of working temperature	Top	—25 to +85	°C	
Storage temperature range	Tstg	—55 to +150	°C	

FM electrical performance, characterization

	Symbol	Value	Unit	Note
Working power supply voltage	Vcc	3.3 Type)	V	
Maximum operating current	I-dd	≤15 (MAX)	mA	
Working environment temperature	AT	25°C	°C	-20—85°C(Range)
AM input frequency range	Fam	520-1710	KHz	
FM input frequency range	Ffm	76-108	MHz	
Reference clock (reference clock frequency)	Fref	32.768	KHz	

Product size and pin function diagram



Pin	Function	Pin	Function
1	Power input	6	FM signal input
2	Data I/O interface	7	
3	Power ground	8	
4	Right channel signal output	9	Set enable
5	Left channel signal output	10	Serial data clock

Typical application circuit

