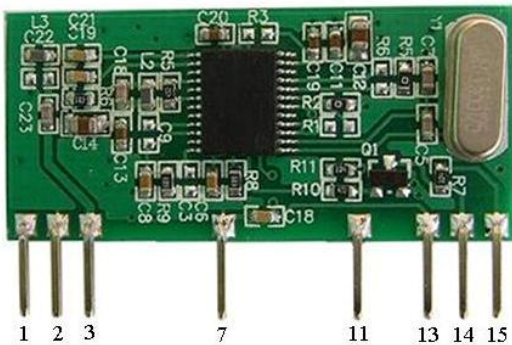




Type: ASK/FSK Superheterodyne Receiver

Model: RXB1-XXX-Y



General Discription:

The RXB1 is a ASK/FSK compatible superhet receiver, Which is designed with high sensitivity, long distance, easy use for designing, it can be able fuffill European market demands.

XXX: frequency definition
(315,433.92MHz)

Y: modulationmode

'A' for AM/ASK mode

'F' for FM/FSK mode

Key Features:

- § ASK or FSK modulation;
- § workingFrequency: 315M/433.92M;
- § Max sensitivity: -116dBm (ASK) , -115dBm(FSK);
- § wide supply voltage: VCC= 2.5 to 5.5 V;
- § IF band: 220KHz;
- § low power cosumption: Icc=6.3mA (FM, Vcc=5.0V@434MHz);
- § Wide operating temperature:-45~+85°C;
- § Excellent selectivity and noise rejection;
- § Easy for applica;
- § Analog RSSI Output.

Applications:

- Garage door and gate openers
- Remote controls
- Remote fan and light control
- Smart home system
- Alarm and security system



Absolute Maximum Rating:

SYMBOL	PARAMETER	CONDITION	UNIT	RATING
V _{cc}	Supply voltage		V	-0.3~6.5
T _{opr}	Operating temperature		°C	-40~+85
	Soldering Temperature	10 sec	°C	350 °C
T _{stg}	Storage temperature		°C	-60~+125

Electrical Parameters:

Condition: Ta=25°C Vcc=5.0V Frequency=433MHz

Characteristics		Min	Typ	Max	Unit	Note
F _c	Carrier Frequency	430	433.92	435	MHz	IF = 220kHz
V _{cc}	Supply Voltage	2.5	5.0	5.5	V	5.0v at default
I _s	Supply current	4.6	6.1	7.6	mA	ASK
		4.7	6.3	7.9		FSK
Modulation Mode		ASK/FSK				
RF sensitivity			-116		dBm	600bps(Manchester), dev≠ 40kHz
F _{dev}	Frequency Deviation		±80kHz			
B _w	-3dB Bandwith		250		KHz	
Datarate			2.4	9.6	kbps	At default
T _{on}	Turn on time from sleep			3	ms	
V _{IL}	“L”level input/output level	0		0.2	mA	
V _{IH}	“H”level input/output level	2.0		5.5	V	
Output leak current (H level)			0	2	μA	
V _{DATAL}	Output voltage (L level)			0.4	V	I _{DATAL} = 200μA
DR	Wave shaping output duty ratio	45	50	55	%	V _{IN} (MIX) = 60dBmVEMFF or single tone
I _{RR}	Image Suppression Ratio		35		dB	
T _{op}	Opertaing Temperature Range	-40		+85	°C	

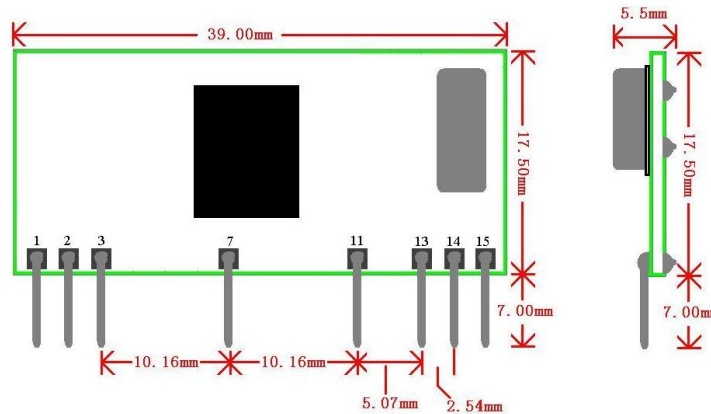


Condition: Ta=25°C Vcc=5.0V Frequency=315MHz

Characteristics		Min	Typ	Max	Unit	Note
F _c	Carrier Frequency	310	314.98	316	MHz	IF = 220kHz
V _{cc}	Supply Voltage	2.5	5.0	5.5	V	5.0v at default
I _s	Supply current	4.3	5.7	7.1	mA	ASK
		4.5	5.9	7.3		FSK
Modulation Mode		ASK/FSK				
RF sensitivity			-115		dBm	600bps(Manchester), dev≐ 40kHz
F _{dev}	Frequency Deviation		±80kHz			
B _w	-3dB Bandwidth		250		KHz	
Datarate			2.4	9.6	kbps	
T _{on}	Turn on time from sleep			3	ms	
V _{IL}	“L”level input/output level	0		0.2	mA	
V _{IH}	“H”level input/output level	2.0		5.5	V	
Output leak current (H level)			0	2	μA	
V _{DATAL}	Output voltage (L level)			0.4	V	I _{DATAL} = 200μA
DR	Wave shaping output duty ratio	45	50	55	%	V _{IN} (MIX) = 60dBmVEMFF or single tone
I _{RR}	Image Suppression Ratio		35		dB	
T _{op}	Opertaing Temperature Range	-40		+85	°C	



Pin Description:



Conection:

Pin 1	N.C.	Not connected.
Pin 2-7	Ground	GND
Pin 3	Antenna	Antenna input, impedance 50 ohm.
Pin 11	N.C.	Not connected.
Pin 13	RSSI Out – Test point	RSSI output proportional to the amplitude of the input signal.
Pin 14	Data output	Data output from the receiver.
Pin 15	+Vs	Positive Voltage supply.

Any questtsons for our product, please contact with us at free:

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