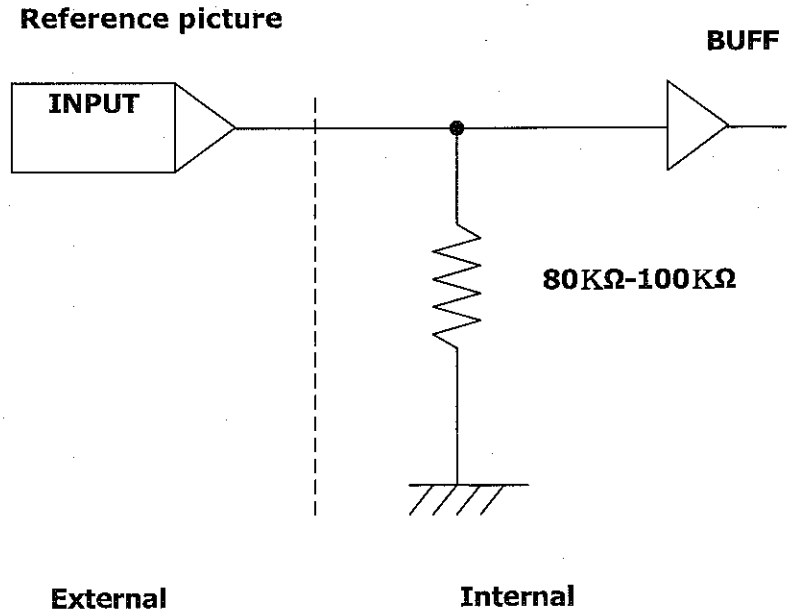
※Internal circuit operates on 3.0V. Design the interface circuit also on 3.0V

Pin NO.	Name of terminal	I/O	Contents
1	CH1	I	TX/RX channels are set by CH1~CH6 The port's input level is CMOS Hi=3V Lo=0V See the other table about the channel setting and frequency
2	CH2		
3	CH3		
4	CH4		
5	CH5		
6	CH6		
9	TXD	I	Input terminal of TX data. Input level is CMOS Hi=3V Lo=0V
10	TXC	O	Timing clock to get TX data. Sending component takes the TX data into internal circuit as the time as the clock build up. Input level is CMOS Hi=3V Lo=0V
11	RXD	O	Output terminal of RX data. Input level is CMOS HI=3V LO=0V The data will be outputted as the time as RX clock is at the trailing edge.
12	RXC	O	Output terminal of RX clock. Input level is CMOS Hi=3V Lo=0V As the time that this clock falls, RX data will be set. Get the RX data when this clock is at the trailing edge.
13	T / R	I	TX/RX switch terminal Output level is CMOS Hi=3V Lo=0V Hi is TX mode and Lo is RX mode.
14	MODCONT	I	Diffusion ON/OFF switch terminal. Normal, (when diffusion ON) Hi=3V and (when diffusion off) Lo=0V. (it can be used for technical test)
15	NC	I	Not used
7	VCC	VCC	Terminal of power supply plus. Supply the voltage between the range of +3.2V to +10.0V
8·16	GND	GND	Ground terminal. Connect it to the "-"side of power supply.

※ All input circuits are pulled down at 80−100KΩ

■ **Reference picture**



5.2 Specification

i) General Characteristics

Item	Rating	Note
Communication Method	Semi-duplex	
Frequency Method	FSK	
Oscillation Method	PLL Controlled VCO	
Frequency Range	2404.0~2480.0MHz	Reception
	2404.0~2480.0MHz	Transmission
Channel Step	2.0MHz	
Number of Channel	39 channels	
Transmission Speed	400Kbps	At Radio circuit (800Kbps)
Rise Time (when power supply is turned on)	Within 20ms	Regular :15ms
TX/RX switching time	2ms	
RX/TX switching time	2.2ms	
Antenna Impedance	50Ω	
1st IF	11.0MHz	
Operating Temperature	−10~55℃	
Operating Supply Voltage	3.2~10.0V	
Current consumption	TX: 60mA	TX(at 25℃/ 3.2V)
	RX: 55mA	RX (at 25℃/ 3.2V)
Size	31.3mm×31.9mm×5.5mm	
Weight	About 6.7g	

ii) Characteristics of sending component

Item	Rating	Condition
TX method	PLL Synthesizer	
TX output	9.0mw±1.0mw/MHz	
Chip Rate of Diffusion	5	
The Stability of Frequency	±30ppm	0~+55℃
Spurious launching strength	25μW	2,387MHz ≦ f < 2,400 MHz
		2,483.5 MHz < f ≦ 2,496.5 MHz
	2.5μW	2,387 MHz > f
		2,496.5 MHz < f
Transmitter Rise Time	Within 2.2ms	
Channel Transit Time	Within 2ms	

iii) characteristics of receiving component

Item	Rating	condition
RX method	Super Heterodyne	
Adjacent Channel selection	Morn than 30dB	±4MHz
Local Oscillator Frequency Stability	30ppm	0 ~+55℃
Secondary	Below -54dBm	Below 1GHz
	Below -47dBm	More than 1GHz
Channel Transit Time	Within 2ms	
Bit Error Rate	1×10^{-3}	Below -80dBm