



DESCRIPTION

CYSR50 is a VHF/UHF UHF wireless data transmission receiver module. CYSR50 Super-regenerative is adapted with LC oscillation circuit, containing amplification, and output data signal into TTL level. It can be directly used with decoder and its very convenience to use. It's very competitive in terms of pricing and performance and that's the reason why it has been widely used. It has a wide bandwidth, generally is plus or minus 5 MHz, frequency usually adjust in 433.92 MHz. Receiving head generally using DC5V power supply. We can also custom voltage as per special requirements. It can be supplied in DC3V, or DC3.5V, or DC4V,..... Maximum DC8V. Standard frequency is 433.92 MHz, it can custom for frequencies from 260MHz to 434MHz as per special requirements. The static working current is commonly 4 mA when leaving the factory, if you have special requirements, we can reduce the current minimum current to 1.0 mA, but receiving sensitivity will be decreased.

FEATURES

- Frequency: 433.92MHz (custom frequency is available)
- Reasonable receive bandwidth, strong anti-jamming ability, adapt to different the environment.
- Save electricity, at 3V power supply, minimum received consumption is about 1.0 mA, but sensitivity will be reduced.
- Microcontroller interface directly, easy to implement.
- Good consistency, compact small
- Data can reach about 6kbps

Limit Rating Table

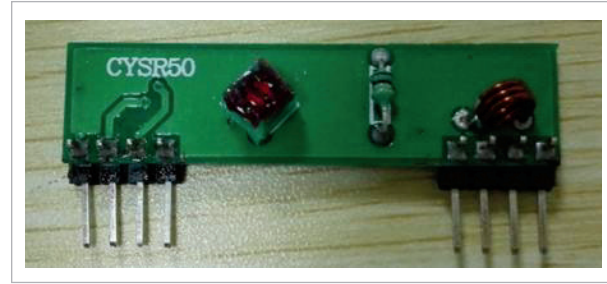
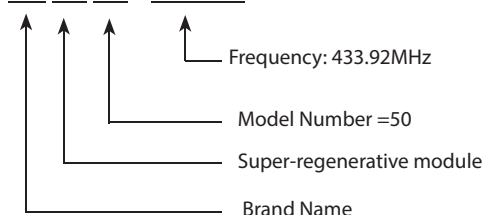
ELECTRICAL CHARACTERISTICS			
Parameters	Symbol	Value	Unit
DC Power Supply Voltage	Vcc - Vss	5	V
Temperature Range	TOPR	-20 to+60	°C
Storage Temperature	TSTG	-30 to+85	°C

ELECTRICAL CHARACTERISTICS

Parameters	Symbol	Status	Reference Value			Unit
			Min	Typ	Max.	
Working Frequency	FC		433.62	433.92	434.22	MHz
Modulation			ASK			
Receiving Sensitivity		50 Ohm Antenna Direct Input BER3/1000, 3.0kbps	-100	-103	-105	dBm
Maximum Input Unsaturated Power				-10	0	dBm
Receiving Bandwidth			±2000	±5000	±8000	KHz
Receiving Start Up Time	Ton				200	ms
Power Consumption	IRC	RX-EN=LOW	3.5	4	4.5	mA
Decoding Output High Voltage			Vcc			V
Decoding output Low Voltage					0.5	V
Working Temperature	TC		-20	60		°C

ORDER INFORMATION:

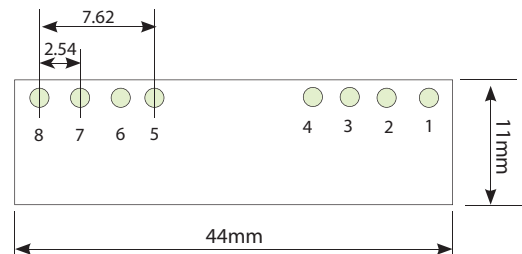
CY SR 50 - 433.92



APPLICATION

- Smart Home system
- Remote controls
- Remote fan and light control
- Garage door and gate openers
- Alarm and security system
- Wireless data transmission

PIN DEFINITION Unit: mm

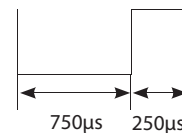


Pin Name	Pin Definition
1 -ANT	RF signal input pin, connect antenna outside (Note1)
2,3,8 - GND	Connect to negative power supply
4,5 VCC	Connect to positive power supply
7 - RX D	Decoding the Square Wave Output

CYSR50 is a wireless receiver module with ASK transmission method. In transmission, ASK mode will produce data signal pulse width change, therefore, when writing wireless data corresponding to make in processing, it should be such as the followings:

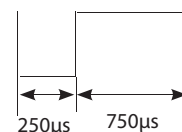
"1"

When Receiving decoding, high level is lower than 500µs, it can be judge as"1"



"0"

High level is higher than 500µs, it can be judge as"0"



Leading code can adopt "1" or "0", starting code adopt 2ms low level