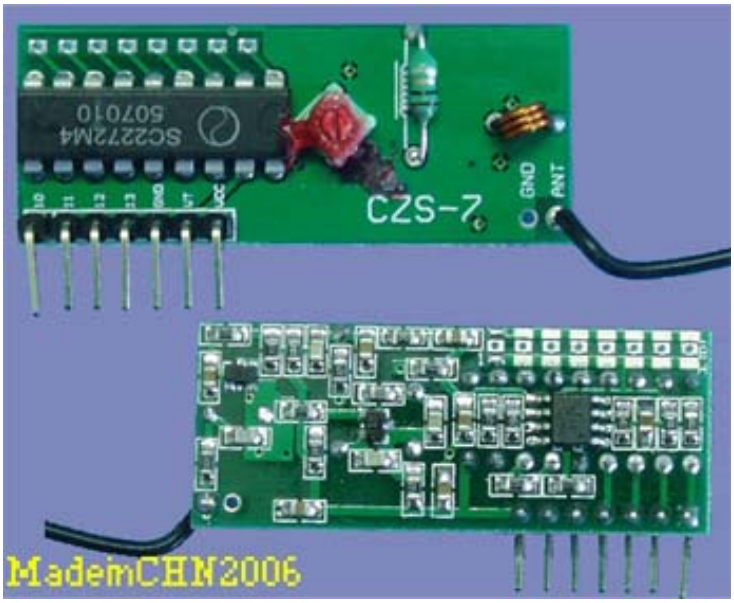
Superregeneration Receiver Module

With Decoder

Model No.:

RM4SG-M: Momentary Mode

RM4SG-L: Latch Mode



A. Technical Specifications:

Parameter	Remarks	Reference Value			Units
		Minimum	Standard	Maximum	
Operating Voltages			DC 5		V
Quiescent Current			5		mA
Modulation Mode	AM				
Transmitting Power					
Operating Frequency		260	315	440	MHz
RF Sensitivity			-103		dBm
Transfer Rate			4.8		K
Decoder	2272 Latch / Momentary Selectable				
Output Mode	High Level				
Coding Mode	Soldering				
Coding Type	Fixed Code				
Dimension(LWH)			49*20*7		mm

B. Pin Function Introduction:

Pin	Name	Function
	VDD/VCC	Power Anode
	GND/VSS	Power Cathode
	D0/13	Signal Output
	D1/12	Signal Output
	D2/11	Signal Output
	D3/10	Signal Output
	VT	Receiving Instruction

C. Product Specifications:

1. Applying LC oscillating circuit, built-in magnifying exchange, output signal is High Level and can directly drive a LED, there are Latch mode and Momentary mode selectable, can be decoded with decoder, easy to be used;
2. There are 4 signal outputs and 8 bit addresse pins with the module, the address pins can produce 6561 non-repeated codes;
3. Module has wide receiving bandwidth ±10MHz;
4. Powered by DC5V source, but the voltage range can be adjusted from 3V to 8V for special requirement;
5. Frequency range of module is from 100MHz to 500MHz with general use of 315MHz;
6. Quiescent current of module is generally 5mA , then can be rduced to be min.1.5mA in case of special requirement, but the receiving sensitivity will be reduced.

D. Notes:

1. Connect 50 ohm 1/4 of wavelength cable antenna (wavelength=light speed/frequency), around 23 cm before using. Pulling out the antenna and keeping it straight will bring good effect.
2. Check if both oscillation resistances of receiver unit and transmitting unit match to each other, if not, the system will not be able to work..
3. Must make sure there are stable voltage and good wave filtration for the module, because low voltage or wave interference of power source will shorten the receiving distance.
4. The same frequency interference will shorten the receiving distance. If SCM is used to connect the module, the SCM should come with low frequency crystal oscillation, if not, with higher frequency crystal oscillation, there will be stronger interference. Keep the module far away from interference source and apply lower frequency crystal oscillation as you can.
5. To avoid affecting the receiving distance, the antenna should be pulled outside of metal shell, for the metal shell will shield, the receiving distance will be affected.

6. Usually should avoid using two receiver modules at the same time, for the oscillation sources will interfere each other and the receiving distance will be shortened.