

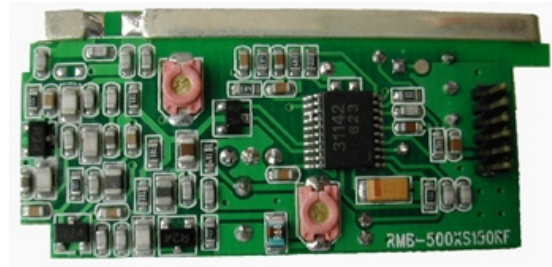
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High Sensitivity FM / FSK receiver Module

The RMB-500XS150 series VHF band data receiver is an ideal design module used for Pager, PDA, wireless sign board, Car Security System, and Remote controller, etc. wireless applications.

Main Function

- Complete with 3 crystals design
- Wide Frequency Range from 138 MHz to 174MHz,
- POCSAG, or 2 Lever formats
- Data rate from 300bps to 4800bps.
- Include AGC circuit (Auto Gain Controller)
- High sensitivity
- Low power consume
- Power saving select
- Low Volt alarm
- Wide operate temperature from -20°C -- +70°C
- Small size
- RSSI output for option
- AF (Audio) output for option



PCB Size: 46mm X 21mm X12mm

Specification

Description	Part No: RMB-500XS150S
Frequency stability	10ppm at 25°C (5ppm option)
Operation frequency	138 -- 174 MHz Crystal Oscillate
Data Rate	300bps to 4.8Kbps.
Modulation	± 4.5K FSK NRZ
Channel spacing	5Khz/10Kh/12.5Khz/25Khz.
Sensitivity	-115dbm with loop antenna, -121dbm with cable direct.
Selectivity	≥60 dB.
Image response rejection	≥50 dB.
Spurious response rejection	≥55 dB.
Working Voltage	DC 3V ± 10%
Power consumption	Battery saving ON 600uA/hrs /B/S OFF 2.15mA/hrs.
Working temperature range	-20 to +70°C
Module Size	46mm X 21mm X 12mm.
Weight	4 grams.

Pin Description

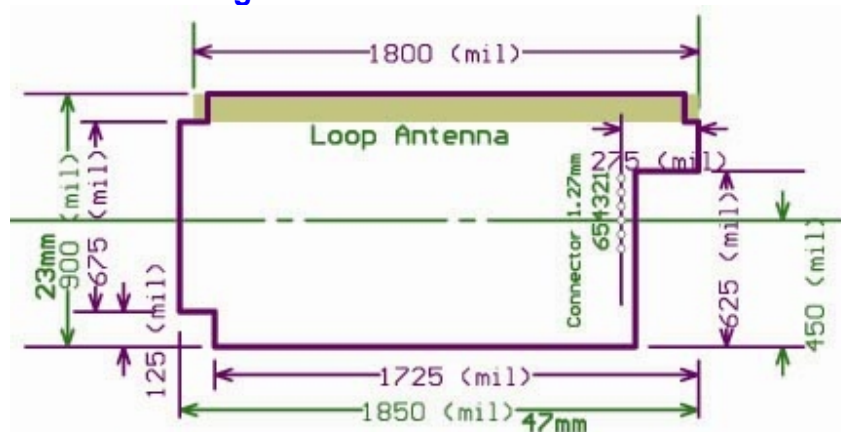
Pin #	Name	Description	Remark
1	Alarm	Low battery volt alarm	If low volt alarm not to using this pin NC
2	Data	Received data output	Plus a resistor 10K ohm to Vcc1** **If Vcc1=3V the data output logic1=3V **If Vcc1=5V the data output logic1=5V
3	B/S	Battery saving	This pin direct connect to Pin#5(VCC) for receiver active, this pin connect to GND for receiver Off
4	GND	System ground	Power source ground and data ground
5	VCC	Power supply DC + 3V	Power source DC2.7V~3.3V Max 5mA
6	(*RSSI) (**AF)	Option Pin for RSSI or Audio output	*RSSI output for Radio Signal Strength Indicate. ** AF (Audio) output for FM and MSK applications.

Pin Lead size: 1.27mm 6 pin single

I If low volt alarm not to using Pin#1 NC

I If battery saving Off Pin#3 pull to Pin#5 (always ON-receiving)

PCB Size and Pin Assignment



RMB-500UHF Series Receiver PCB size keepout
Yoyang Inc Taiwan Y6170227044