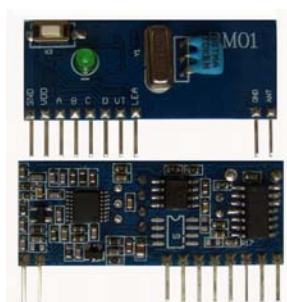


RM01 ASK Receiver

Superheterodyne Receiver Board

General Description:

RM01 is Super-heterodyne fixed code receiver board that used to receive on-off signal with 4 channels. The module based on PT2272 remote control decoder, provides better anti-jamming and stability due to the having Super heterodyne receiving IC, preamplifier, narrowband ceramic filter and SAW resonator. 315MHz and 433.92Mhz are available.



Features:

- ◆ Small Size
- ◆ High Stability
- ◆ Rolling/Study Code
- ◆ Low Power Consumption
- ◆ 4 Channels TTL Output; Easy to Use
- ◆ Available Frequency: 315MHz & 433.92MHz

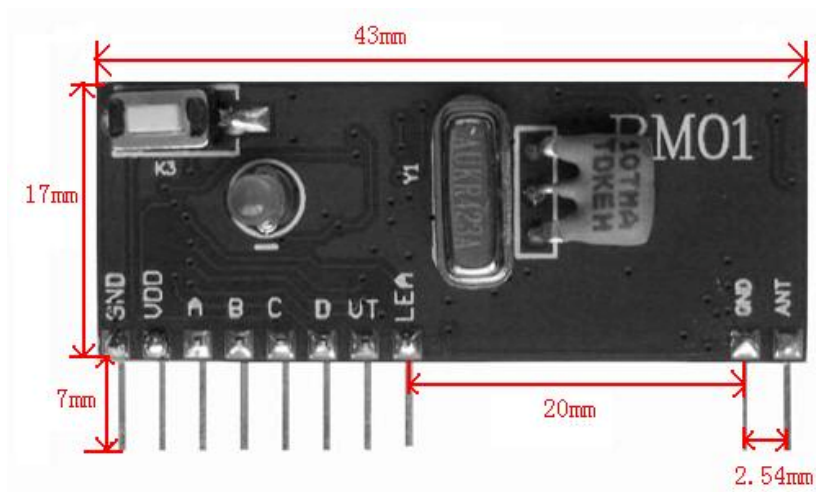
APPLICATION:

- ◆ Smart Toys
- ◆ Remote Control System
- ◆ Garage Door Controller
- ◆ Industrial Automation System
- ◆ Remote Keyless Entry, Car Security System
- ◆ Alarm System, Remote Controlling for Home Appliances.

Specifications

Quiescent Current	≤11mA
Voltage	DC 3 to 5V
Code Type	Rolling/ Study Code
Modulation	AM/ASK
Output Type	Latch or Momentary Output Type Set Ex-factory
Sensitivity	-110dBm
Receiving Frequency	315/433MHz
Operating Temp	-20~+70℃
Size	43L*17W*5H mm

Dimension



Interface definition

Pin	Pin name	Description
1	GND	Grounding of Power Supply
2	VDD	Power Supply DC
3	A	Data
4	B	Data
5	C	Data
5	D	Data
7	VT	Valid Transmission. (VT in high state signifies it receives valid transmission waveform.)
8	Lea	Learn Code

Electrical Characteristics

Parameter	Conditions	Min	Typ	Max	Unit
Supply Voltage		3	5	5.5	V
Current	5V	8.0	10.0	12.0	mA
Modulation	ASK				
Sensitivity	4kpbs rate		-110	-113	dBm
Channel Width			±230		KHz
Data Rate			2.4	9.6	kpbs
Receiver Turn on Time			10		ms

How to Learn Code:

Press and release the learning button, the learning LED will be off after one blink, then press any button of the transmitter until the learning LED shines for one second and then keep flashing, it means the learning is successful. If the learning LED keeps on weak flashing while the button of transmitter is pressed, it means the learning fails; the same steps need to be done again. To add more transmitters just needs to repeat the first, 15 transmitters as maximum. To unchain the matching of transmitter and receiver module, keep pressing the study button for 8 seconds until the learning LED is off and all the stored codes will be erased.

Notes

- ◆ Ensure the supply is stable and good wave filtration (ideally <10mVpk ripple).
- ◆ Keep the module away from other EMF generating components. The same frequency interference will shorten the receiving distance. If SCM is used to be decoder, the SCM should come with low frequency crystal oscillation, if not, with higher frequency crystal oscillation, there will be stronger interference.
- ◆ 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.
- ◆ Antenna : Length = 22.6cm for 315MHz ; Length = 17 cm for 433.92MHz.