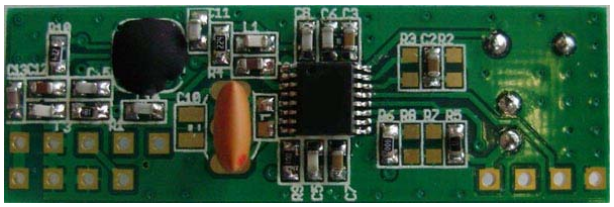


1.0 Introduction

LW120M is a miniature receiver module that receives on-off keying (OOK) modulation signal and demodulates to digital signal, which would be processed by a decoder on the next stage. Local Oscillator is made of PLL structure. The result is an outstanding performance and easy to use, with very few external components. LW120M is designed specifically for remote control and wireless receiver security operating at 315/433.92Mhz in the USA under FCC Part 15 regulation.

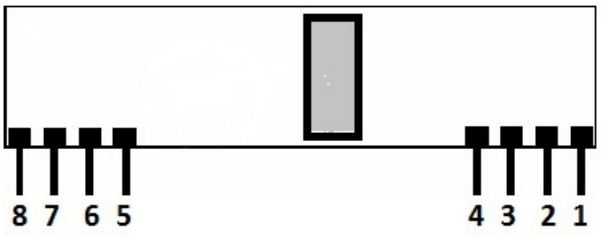
2.0 Features

- Ideal for 315/433.92MHz Remote Keyless-Entry Receives.
- Phase-Locked loop Feature.

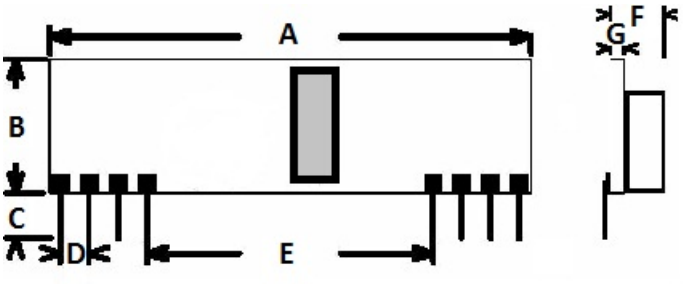
3.0 Applications

- Remote controllers
- Security systems such as car alarm
- Wireless door bells
- Garage openers
- Radio controlled toys
- Monitoring systems
- RFID

4.0 Pin Description



LW120M		
Number	**Name**	**Description**
1	GND	
2	DATA OUT	Demodulator output.
3	CE	Enable
4	VCC	DC voltage supply
5	VCC	DC voltage supply
6	GND	for RF only , please setup the pin on N.C when it did not used
7	GND	for RF only , please setup the pin on N.C when it did not used
8	ANT	



Dimension	Millimeters	Dimension	Millimeters
A	44+/-0.25mm	E	25.5+/-0.15mm
B	14+/ -0.25mm	F	8.3+/-0.05mm
C	9+/ -0.1mm	G	1.2mm(MAX)
D	2.54mm(MAX)		

5.0 Electrical Characteristics

5.1 Maximum ratings

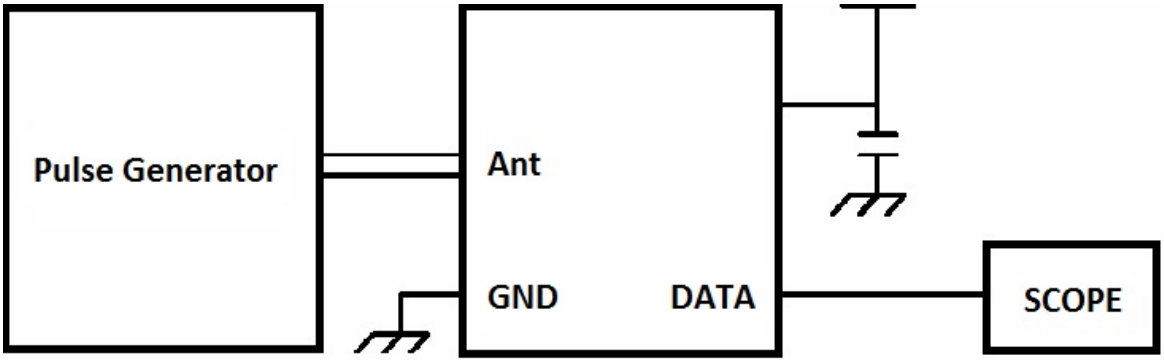
Rating	Value	Units
Power Supply and/or Modulation Input Voltage	2.7 to 5.5	V
Operating temperature	-40 to +80	℃

5.2 Receiver Characteristics

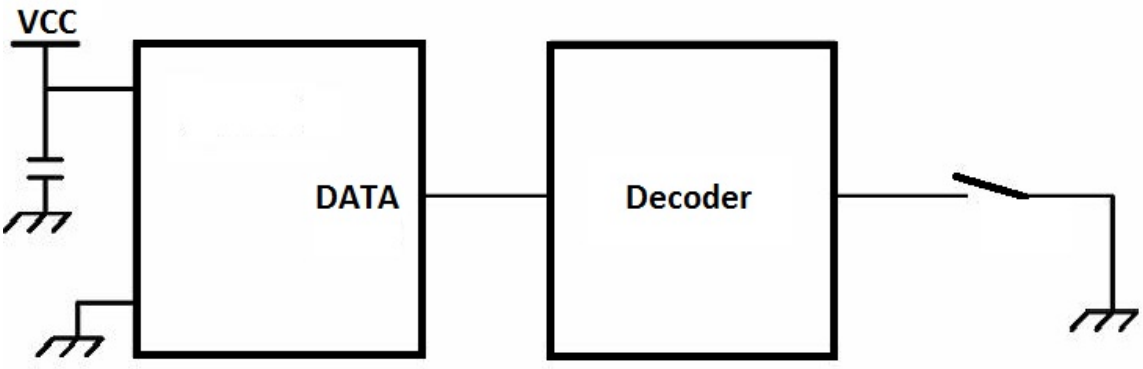
Paramater	Symbol	Condition		Value			Unit
				min.	typ.	max.	
Sensitivity	Psens	Vcc=3.0V,TA-27℃,BER=3/100, 2Kbps	315MHz	-115	-116	-117	dBm
			433.92MHz	-113	-114	-115	dBm
Supply current	Icc				3.8		mA
Supply Voltage Range	Vo			2.4	3	5.5	V
Data rate				1K	3K	10K	bps

6.0 Applications notes

6.1 Typing Test Circuit



6.2 Typical receiver application



Notes:

1. Decoder : HT12D/F,PTC(2272)
2. Antenna : Length=22.6cm for 315MHz; Length=17cm for 434MHz.

7.0 IMPORTANT NOTICE

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