# **Antenna description:**

Frequency range: 462.5625 (MHz)

Output impedance: 50 ( $\Omega$ )

Standing wave ratio: less than or equal to 1.5 (dB)

Working voltage: 0 (V)

Antenna material: carbon steel

### Circuit described

The whole machine is composed of receiving and firing. The antenna and impedance match the power parts of the circuit

### 1, the receiving part

By the antenna to high frequency radio signals through a low-pass filter to filter the jamming signal of except the band, sent to the RF transceiver chip circuit, chosen from the radio frequency signal, by mixing processing/audio amplifier circuit processing, voice signal after amplification promote trumpet sound

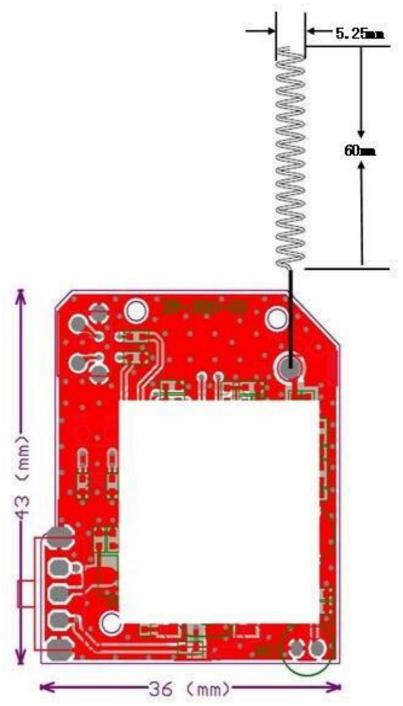
### Part 2, launch

Voice signal by MIC amplifier amplification, the frequency selective RF transceiver chip circuit processing, finally chosen by low-pass filter of the carrier frequency signal frequency and impedance matching, carrier frequency current by the antenna can change this element into electromagnetic radiation into the air.

## Part 3, power supply

The 9V battery is processed by the capacitance circuit filter and the voltage stabilized IC is processed to output 3.3 V power supply road

Band	Operating Mode	TX Frequency (MHz)	Time average Output Power	
			Nominal	Maximum
FRS	Voice	462.5625	8 dBm	10 dBm



- 1. DC voltages applied to and dc currents into the several elements of the final radio frequency amplifying device for normal operation over the power range: 2.5V~3.3V; 20mA.
- 2. RF IC (BK4802N) provides for determining and stabilizing frequency, for suppression of spurious radiation, for limiting modulation and for limiting power functions.
- 3. The antenna is designed such that the electric field of the emitted waves is vertically polarized when the unit is operated in the normal orientation.