

### **TMP3FT2 Circuit description**

1. The 3V voltage that provided by 2 x AAA batteries provides the power for PLL IC MW\_S5 after it's been stabled by regulating circuit (be made up of Q2, Q4, Q5, R6, R7, R27), then the unit would be standing by. Once the switch S1 be pressed, PLL IC MW\_S5 start the electronic switch to power for the whole unit, when the OSC circuit (be made up of D5, L5, Q6, R13, R14, R19, C15, C16, C27, C28, C29) start to work, with the vibratory frequency is around 98.80MHz. After be sampling by PLL IC MW\_S5, this frequency will send a tuning circuit onto BD910 to make the vibratory frequency be stabled at 98.8MHz, at the same time, PLL IC MW\_S5 will supplier the power for D1. Been increased by class 1 enlarging circuit, this frequency will be sent out through inner antenna once the tuning wave been removed by high frequency removing wave circuit. While pressing S1 in turn, PLL IC MW\_S5 will send tuning voltage to make the vibratory circuit at 99.0MHz, 99.2MHz, 99.4MHz, meanwhile PLL IC MW\_S5 will supply power for D2, D3, D4 in turn.
2. While the unit working, the audio signal that input by audio inputting wire will be adjusted to BD910 by impedance matching network, then BD910 will modulate it to OSC frequency then send it out.
3. While the unit working, PLL IC MW\_S5 will check the audio through audio testing circuit (be made up of Q8, Q9, D6, R22, R23, R24, R25, C33, C32). When there's no audio be input, it will start to time, and if still no input audio within 15 minutes, PLL IC MW\_S5 will off the electronic switch, then the unit will stop working.