63-1123/63-1124 Circuit Theory

Transmitter

The 63-1123/63-1124 transmitter consist of MCU control circuit, 433MHz oscillator circuit and 3V regulator circuit. The oscillator circuit composed by Q201 and Y202. It acts as an oscillator and transmitter. The RF frequency is determined by the SAW resonator (Y202). The RF signal is transmitted through the loop antenna that is printed on the PCB. The encoded data signal sent from pin 15 of the MCU (U201). It is then applied to the base of Q201. The data drive Q2 to transmit the RF signal that is pulse amplitude modulation.

There is a voltage regulator formed by Q202 and Z201 to provide a stable voltage supply to the MCU.