

## **DESCRIPTION FOR THE MODEL SFT-8038**

### **TX SECTION:**

- **Tx match filter is a filtering and matching circuit, which include the capacitor C145, C36, C144.**
- **RF Amp is achieved by using two transistors Q21 and Q7. The RF signal is applied to the base of the transistor Q7 for amplification, then collect of Q7 signal is applied to the base of transistor Q21 for amplification. The signal will be sent to the antenna.**
- **The local Oscillator and Modulator is a combination of circuit components of Q1, L24, VD4 which are constructed to from a modulator circuit.**
- **OSC, Phase Lock Loop are formed by X1 and U9.**
- **Tracking filter circuit is formed by C81, C77, R37, C84, R62.**
- **Audio detector circuit is achieved by using R54, R124, R137 to sense the 19K audio signal from CPU.**
- **Audis Amp is achieved by U10-A, B to provide amplified audio signal to the modulator circuit. The AGC is controlled by Q28, Q29 for automatic level control.**
- **In the transmitter mode, the local Oscillator and Modulator is a combination of circuit components of Q1, C24, DR1 the Oscillator frequency is 925.7MHz. In the Receiver mode, the Oscillator frequency is 915MHz.**