

CIRCUIT DESCRIPTION FOR FP-G4120-USA

TRANSMITTER SECTION

RF Frequency Oscillator

Q2 function as a oscillator for transmitter, that the frequency is determined by C4, C5, T3, X1 and X2.

RF Amplifier and Power Amplifier:

Q1 is the power amplifier of transmitter, The triple frequency signal obtained from T2, that fed to the base of Q1.

Circuit for Suppression of Spurious Radiation

RF power output from the collector of Q1 is coupled to the antenna through T1, “LC” and “PI” network (C1, L2, C3, L1) which used to get max power and min harmonic level.

Modulation

U1-A, U1-B is the MIC amplifier. The amplifier audio signal from U1-B output is fed to D2, for making F3E type modulation.

Circuit for limiting Modulation

Q10 and Q11 give the auto MIC control circuit. When the modulating voltage is excessive, the DC voltage will be obtained on the emitter of Q10 which turns to Q11. This feedback system keeps the maximum modulation.

Power Supply:

SW2 is power supply switch for the baby unit.

Us is a regulator that the output DC voltage is 4V. This stable output is used to feed to IC U2. Power amplifier. RF amplifier.