

EL190 F22, 49.820 ~ 49.900MHz Transmitter Operation Description

The Microprocessor (U1, Figure 1) reads input commands (SW2/SW3/W2/W3, Figure 1), and then encodes them to digital codes. The codes are sent to RF oscillator via pin 6 of U1, Q6, Q7 and then modulates 49.820 ~ 49.900 MHz carry frequency signal via Q1 (Figure 2) to achieve AM signal.

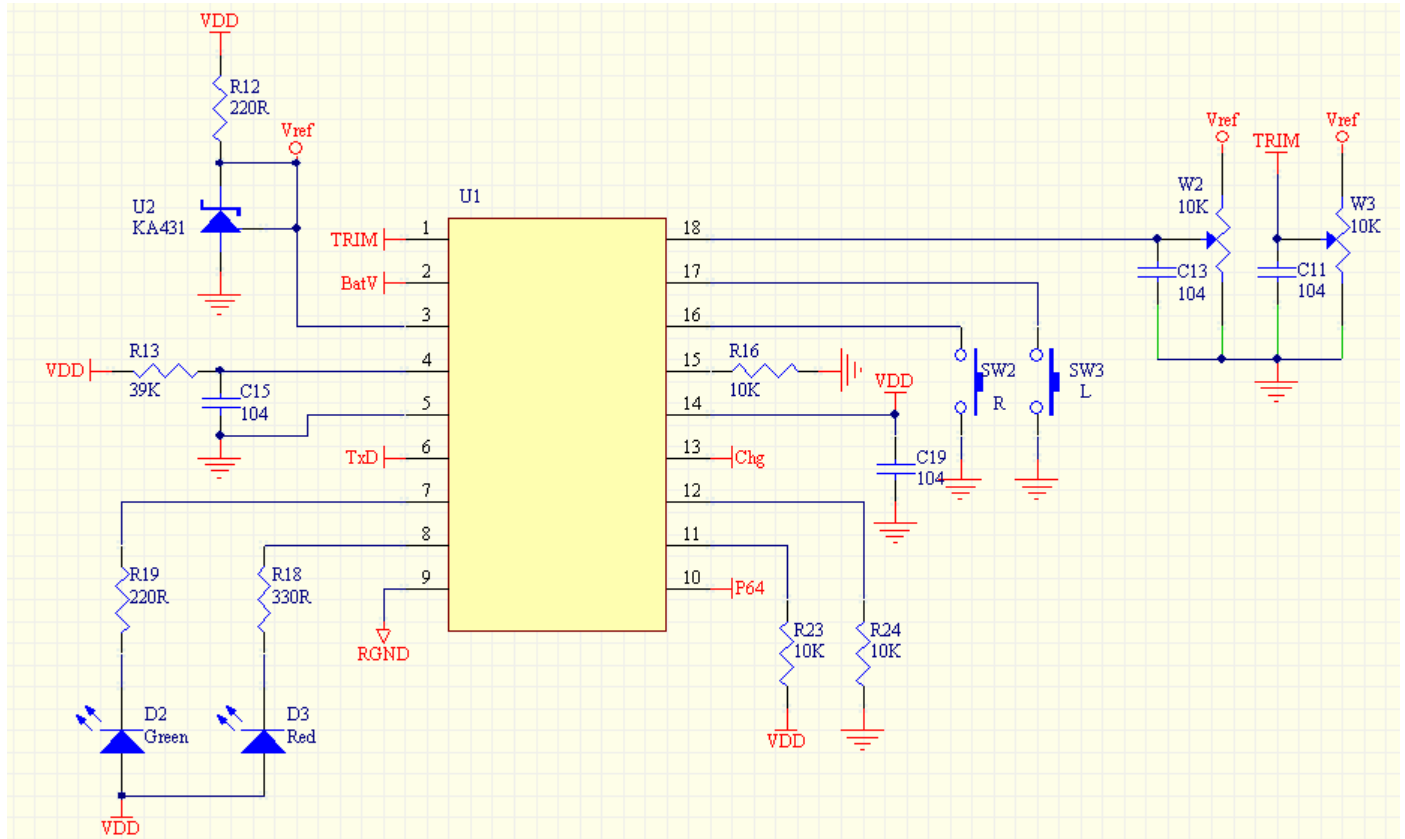


Figure 1

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The Radio Frequency of the transmitter is based on standard 49MHz AM citizen's band. It generates low power 49.820 ~ 49.900MHz AM carrier frequency via major components of Q1, Y1, L1, C5, R4, R3 and R28 etc. (**Figure 2**). Please see the attached schematics for more detail.

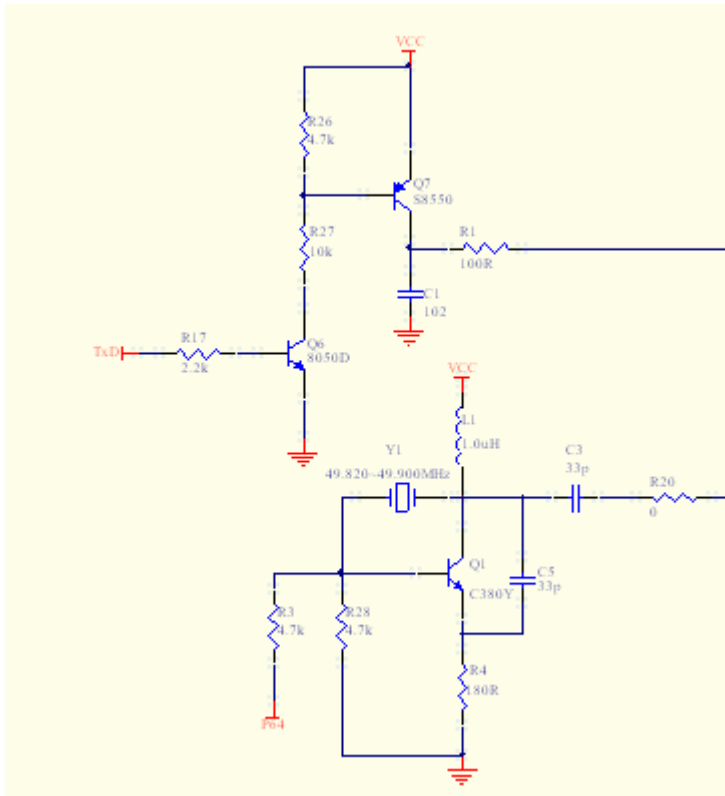


Figure 2

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The AM signal (via capacitor C3) is passed to RF amplifier (**Figure 3**, Q2, C8, R9, and L2), which amplifies the signal and then couples the signal into the antenna (ANT1) via components C4, C6, L4, C7 and L3.

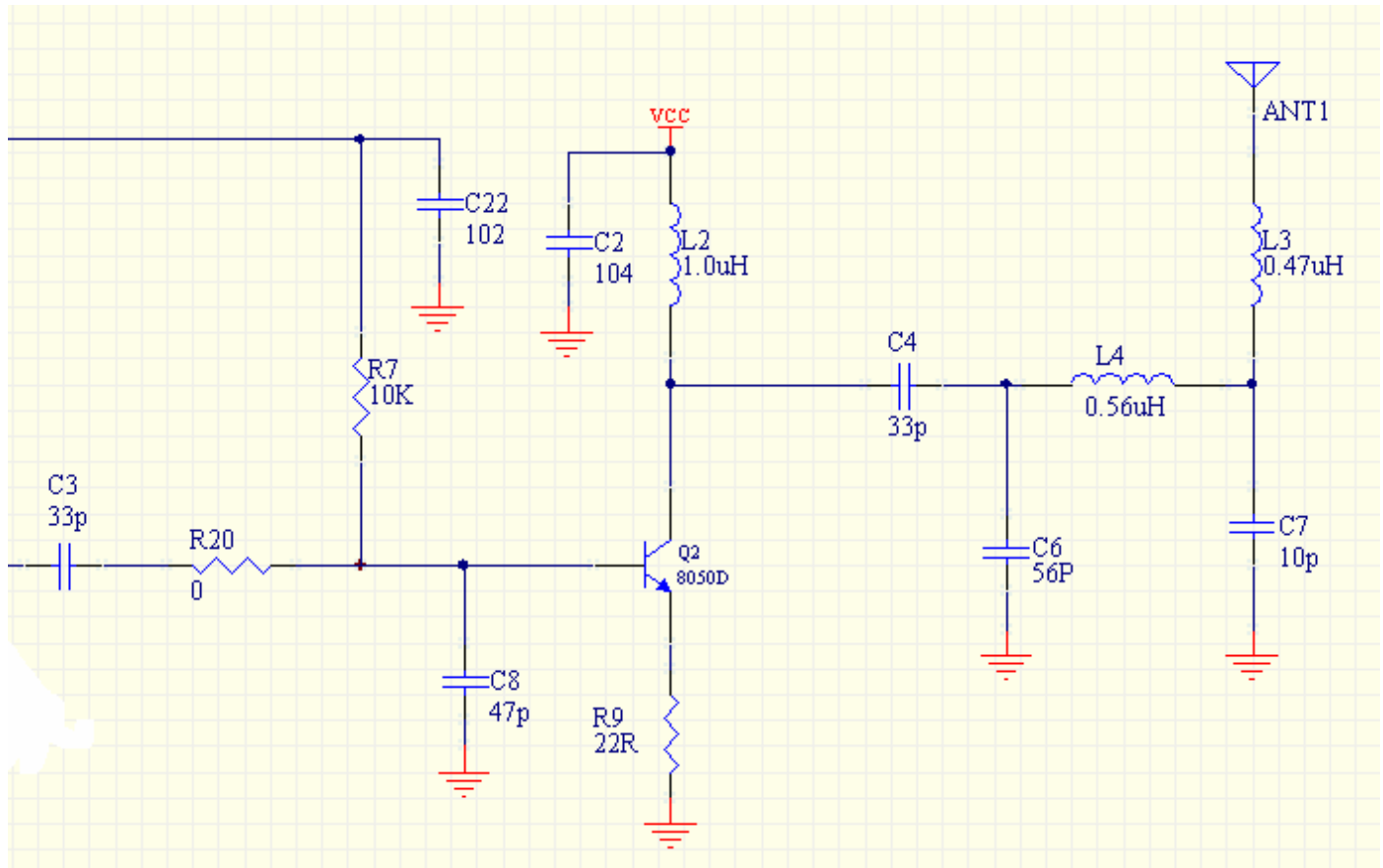


Figure 3