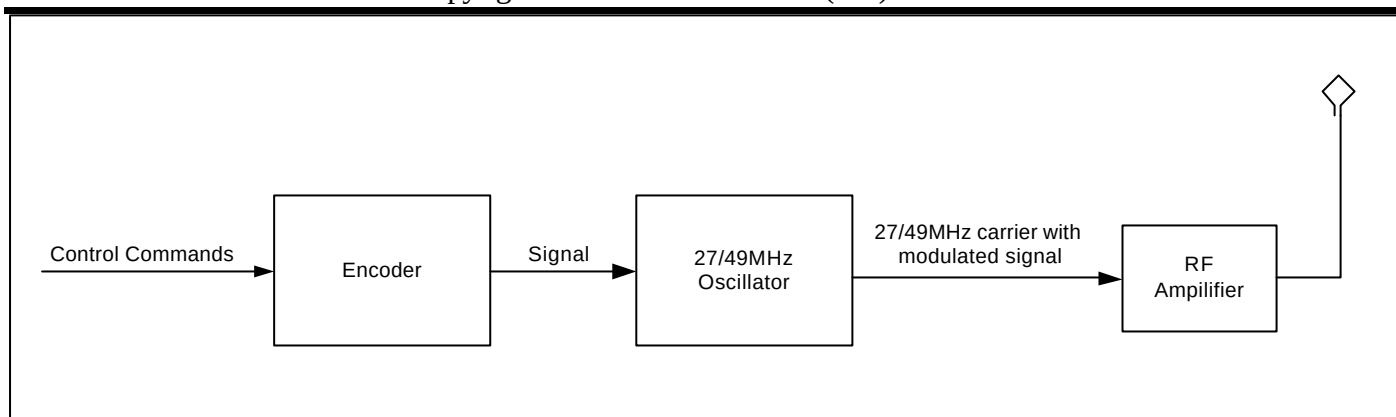


EL069 Wireless Submarine, 27/49MHz Transmitter Operation Description

©Copyright 2004 EDU-SCIENCE (HK) LIMITED



The Radio Frequency of the transmitter is based on standard 27/49MHz AM (Amplitude Modulation) citizen's band. It generates low power 27/49MHz AM carrier frequency via major components of Y1, R2, R5, R7, L1, Q1, L6, C10, C11 and C13 (Figure 1).

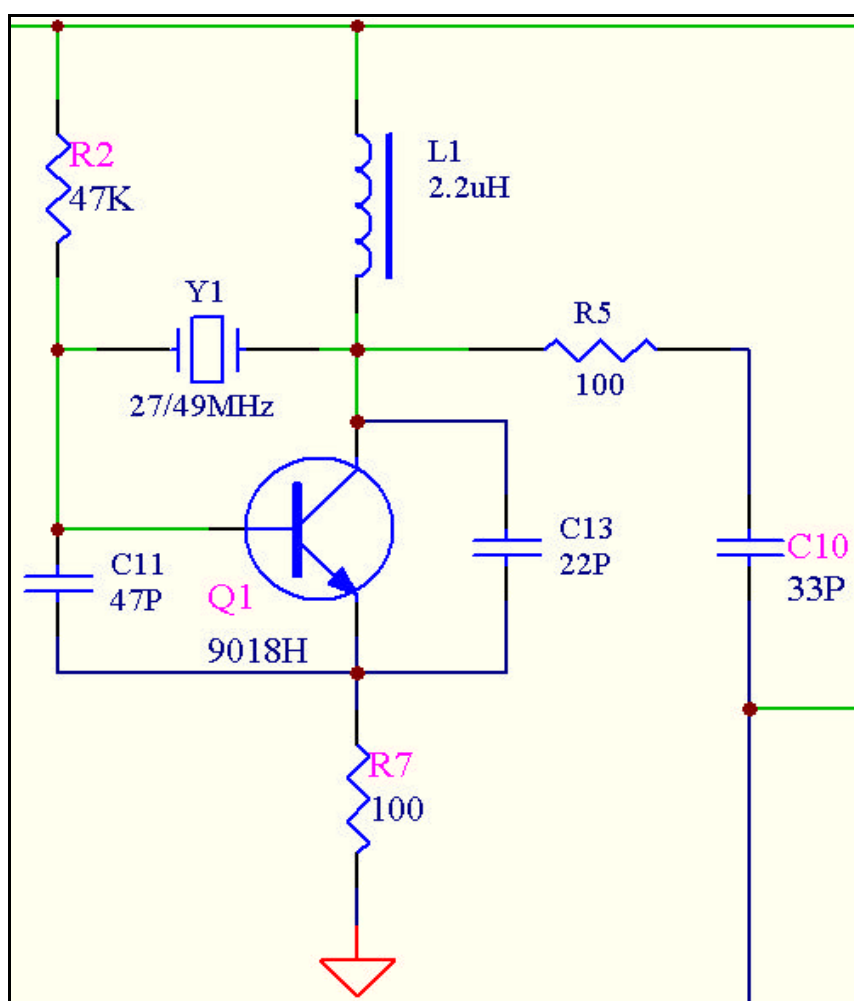


Figure 1

EL069 Wireless Submarine, 27/49MHz Transmitter Operation Description

©Copyright 2004 EDU-SCIENCE (HK) LIMITED

The Encoder (U1, Figure 2) reads input commands and modulates these commands (intelligent) with the carrier frequency (as shown in figure 1) via pin 8 (SO, U1, Figure 2) to the RF amplifier.

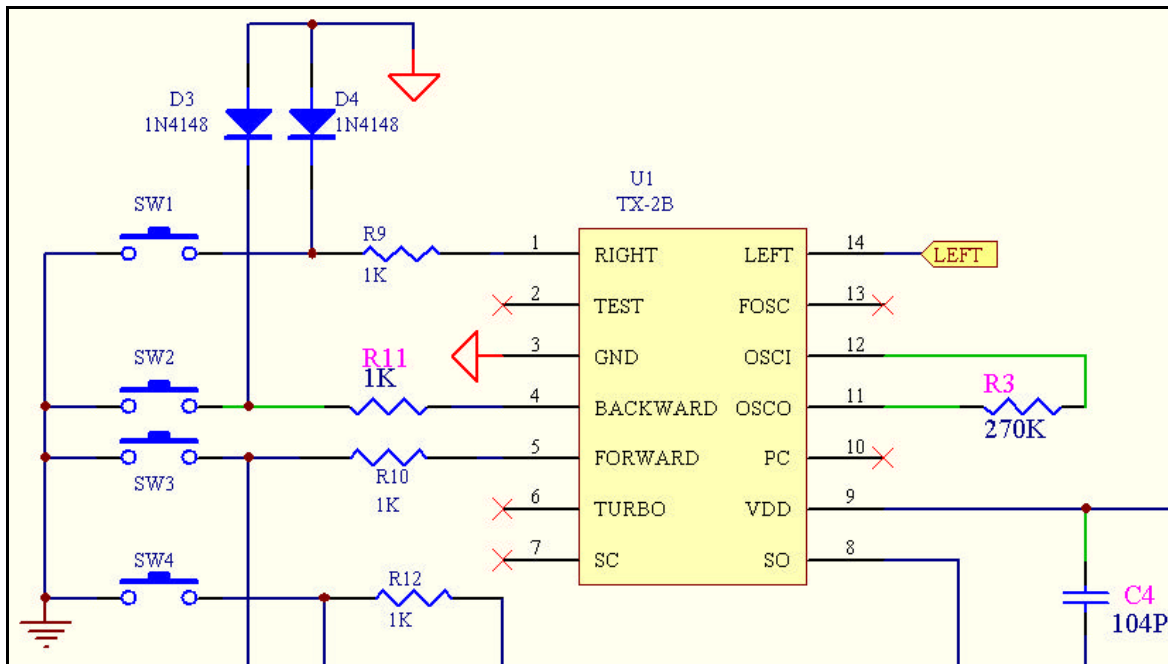


Figure 2

The modulated signal is passed to the final stage of RF amplifier (Figure 3), which amplifies (Q2, R6, C1) the signal and then couples the signal into the antenna (ANT1) via components C3, C6, C7, C8, T1 and L4.

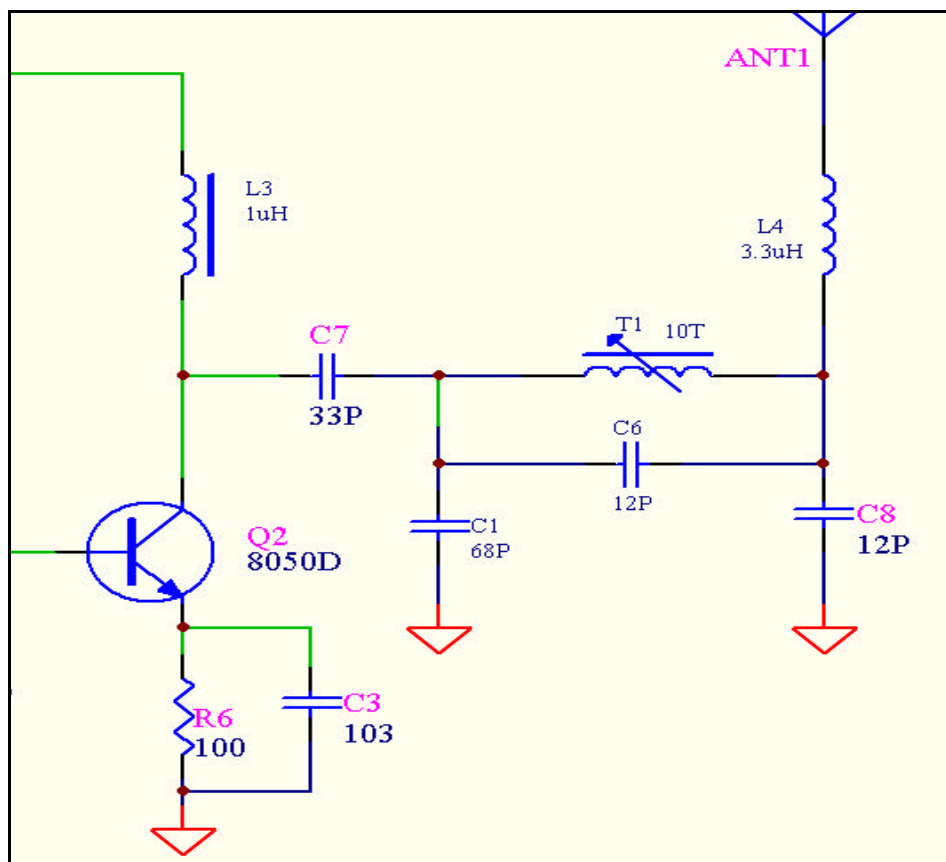


Figure 3