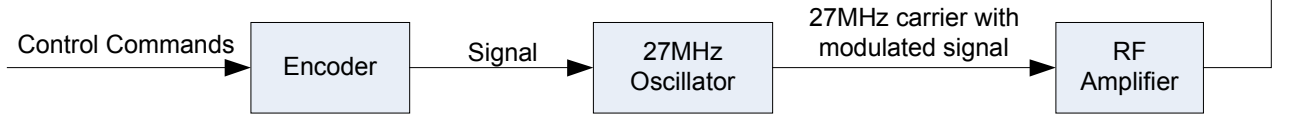


# EL186 AIR GRIP, 27MHz Transmitter Operation Description

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## EL186 AIR GRIP TRANSMITTER BLOCK DIAGRAM



The Radio Frequency of the transmitter is based on standard 27MHz FM (Frequency Modulation) citizen's band. It generates low power 27MHz FM signal via major components of Q1,Y1,D1,C9,C10,R2,R6,R8 and R10 (**Figure 1**).

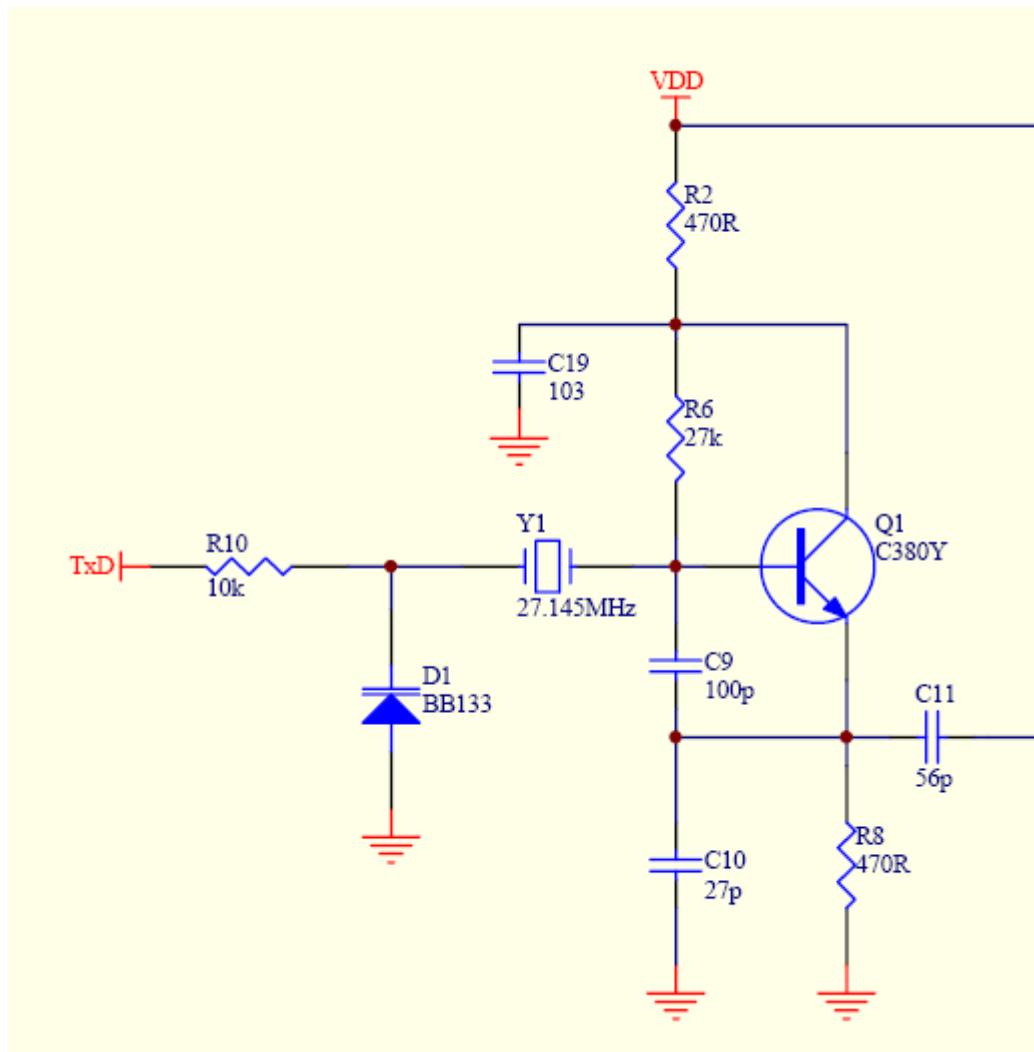


Figure 1

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The Encoder (U1, **Figure 2**) reads input commands, encodes them to digital codes, and send digital codes to RF oscillator via pin 8 of U1. Then the digital codes modulates the 27 MHz carrier signal to FM signal (*as shown in figure 1*).

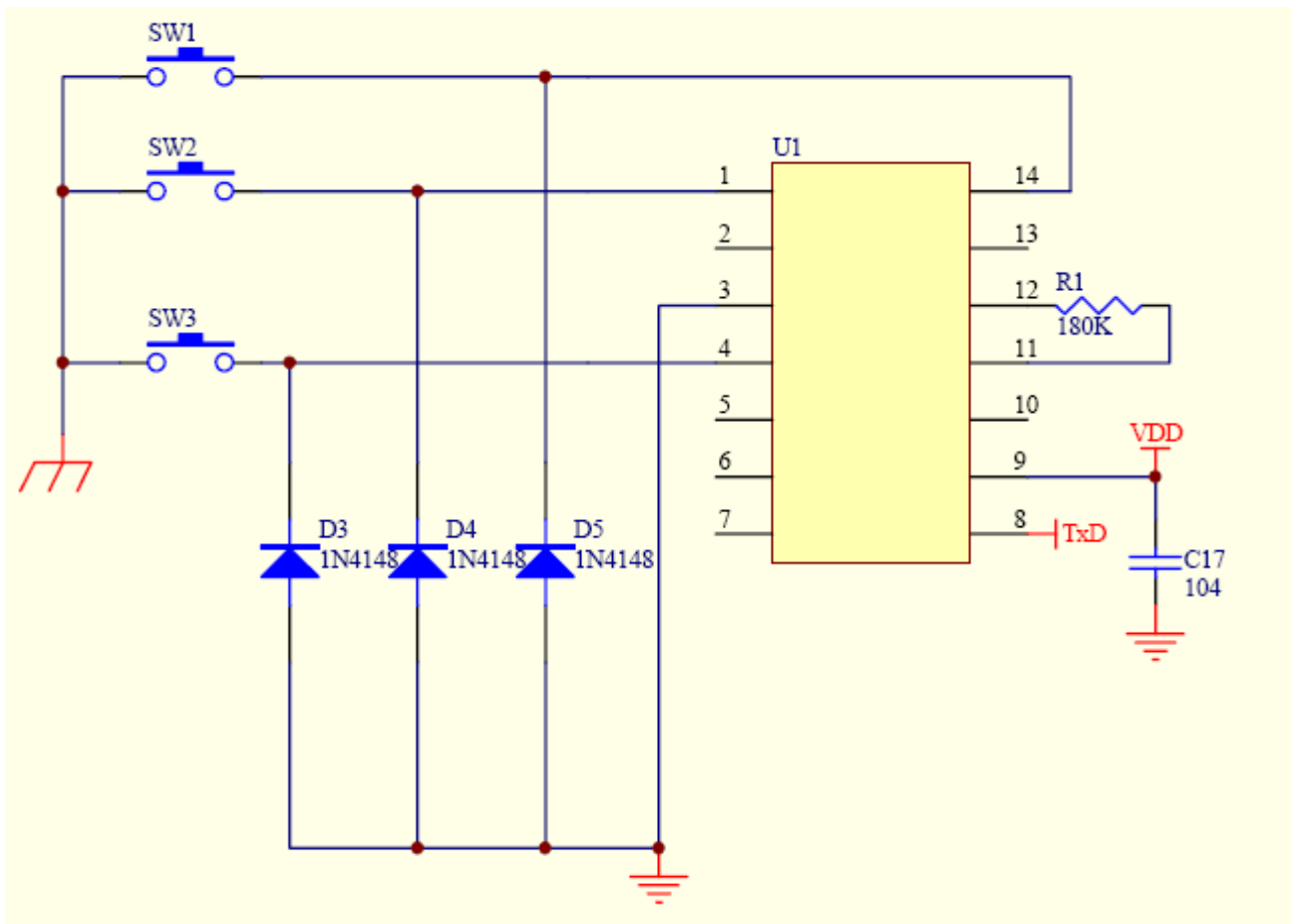


Figure 2

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The FM signal (via capacitor C11) is passed to RF amplifier (**Figure 3**, Q3, C18, R4, R9, and L1), which amplifies the signal and then couples the signal into the antenna (ANT1) via components C13, C14, L4, C15 and L5.

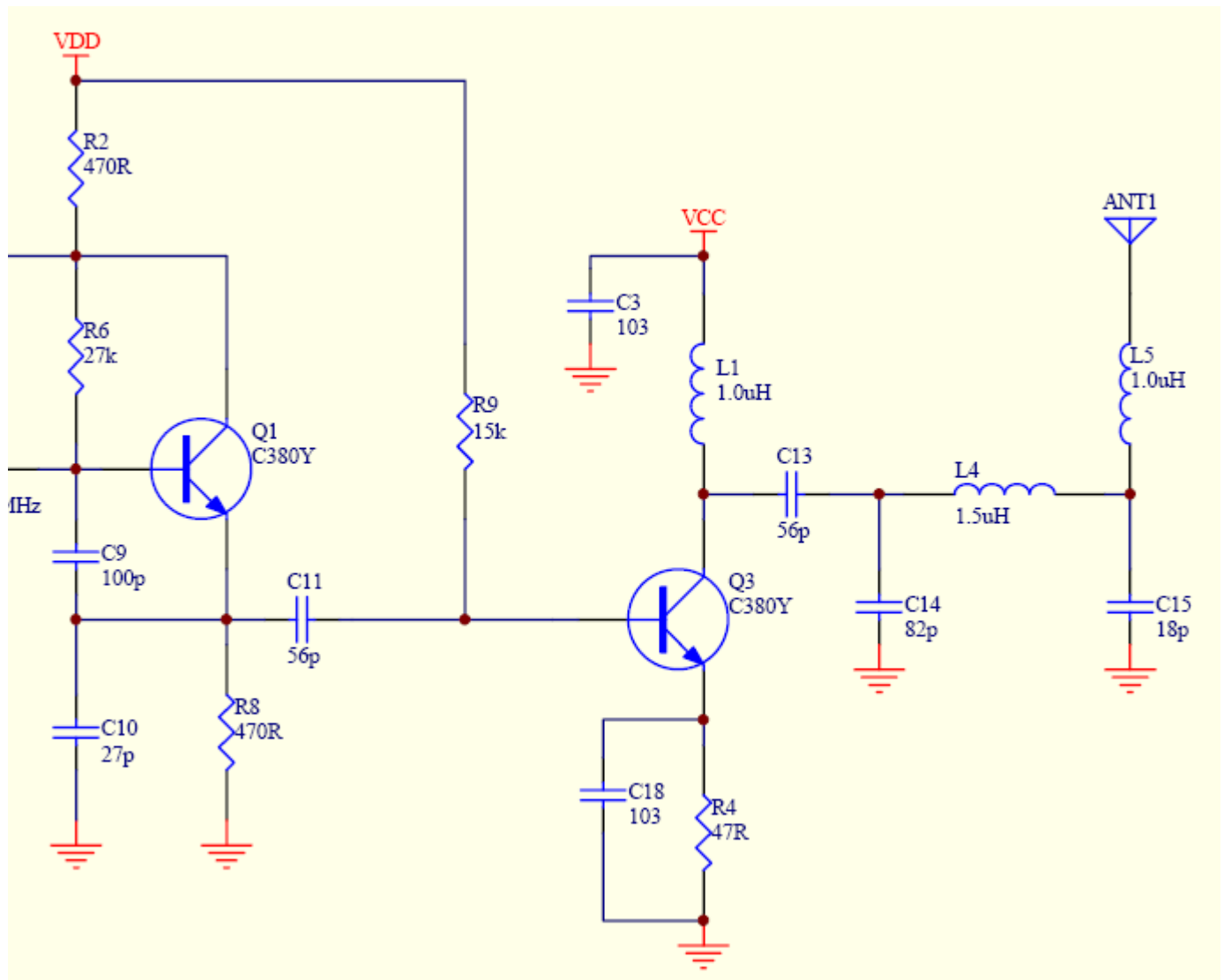


Figure 3