ECE 443 APPLIED ELECTRONICS - LAB 10 CRYSTAL OSCILLATOR

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Abstract—This lab experiment aims to teach students how to implement the rf crystal oscillator.

1. METHODS

Parts: $R = 10k\Omega$, C=47pF, Q=BD137 bjt transistor
1. Implement the following circuit (Fig.1).
2. Observe the amplitude of the output waveform and draw it in your

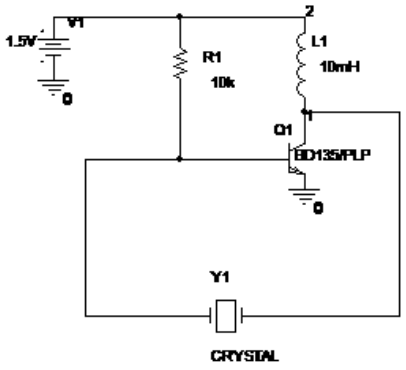

Figure 1. a)Circuit Diagram

lab notebook.
3. Comment on the results.

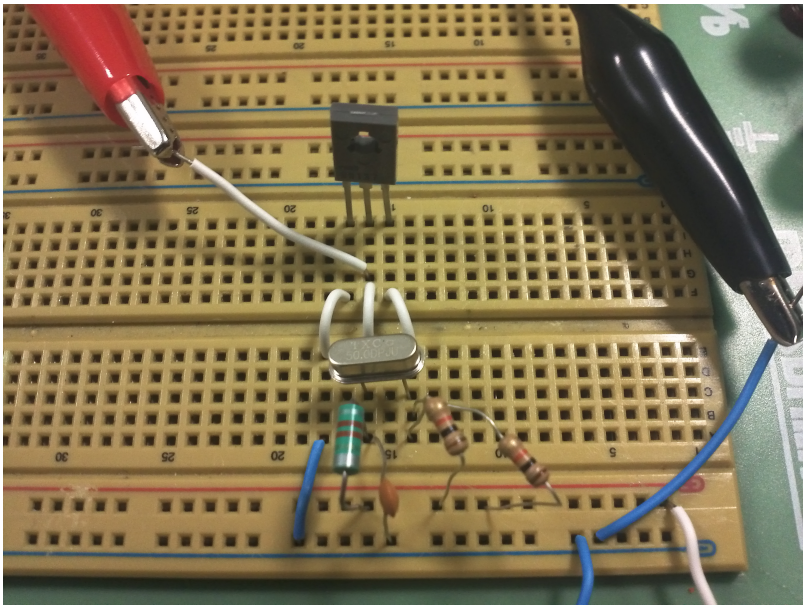

Figure 2. a)PCB Circuit Diagram

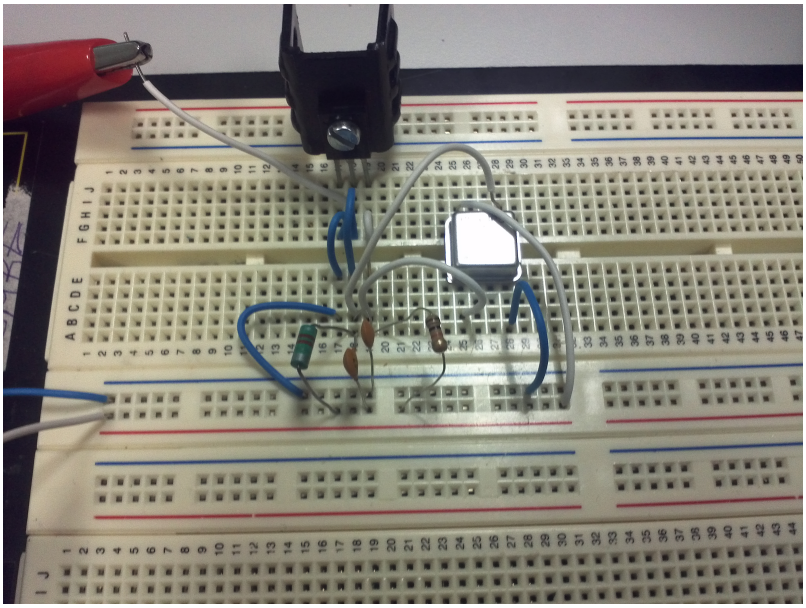

Figure 3. a)PCB Circuit Diagram