

Positive Negative Power Supply

1. Introduction

This power supply is one of the methods that you can use to design a negative and positive power supply:

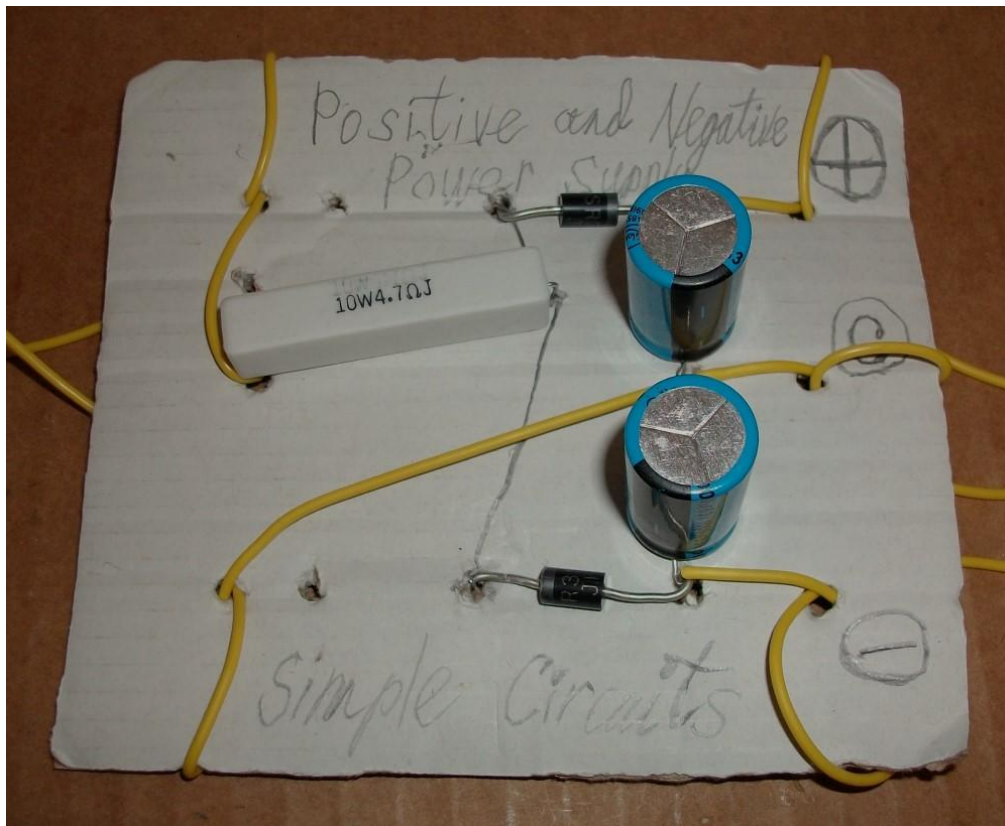


Figure 1: Power supply circuit.

2. Design the Circuit

I used Schotcky diodes that have a low forward bias voltage. There is one risk with this circuit. Each diode has a maximum breakdown voltage. This reverse breakdown voltage can cause **high** current to flow from V_n to V_p . However, this voltage is usually no less than about 100 V. Tuhs you have nothing to worry about.

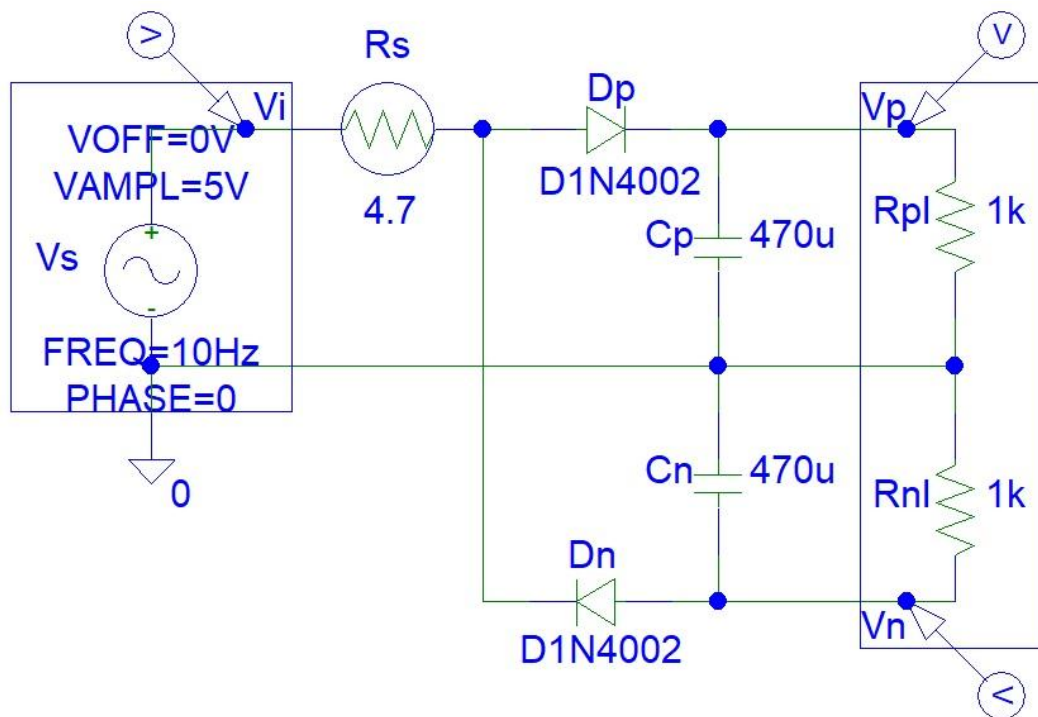


Figure 2: Circuit design

3. Simulations

PSpice simulations:

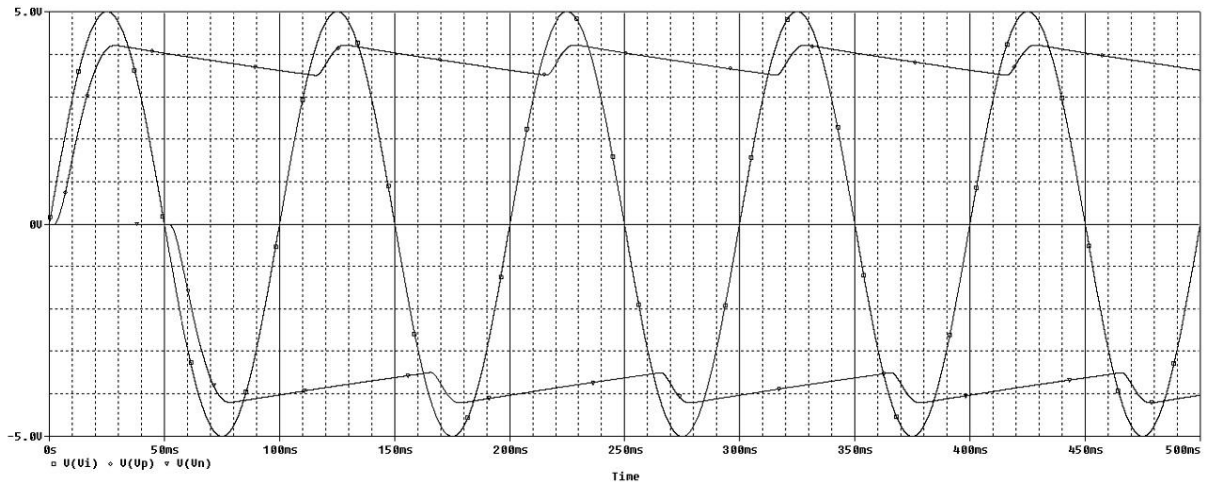


Figure 3: Circuit output was tested for a minimum frequency of 10 Hz.

4. Make the Circuit and Testing

Testing video is shown here:

<https://www.youtube.com/watch?v=f0NyDAnF8LY>