Laboratory 0: Diodes

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Full wave rectifier

Diodes are mostly used for rectification. Rectifier is a type of circuit which converts from AC to relative DC. A single diode can provide half wave rectification. The other half is clipped. The full wave provides positive rectification for both input cycles. Construct the circuit as shown in Figure 1. Observe input and output signal in oscilloscope. Capture the input and output signal with respect to time domain and plot the same in your lab report.

The above configuration is a bridge rectification. You could use a center tap transformer and provide full rectification using only two diodes. Refer to web and build the circuit in breadboard to provide the output and input voltage with respect to time domain in lab report. Make sure that 100 K Ω, 470μF and 300 K Ωremains in the same position as shown in earlier part of the circuit.

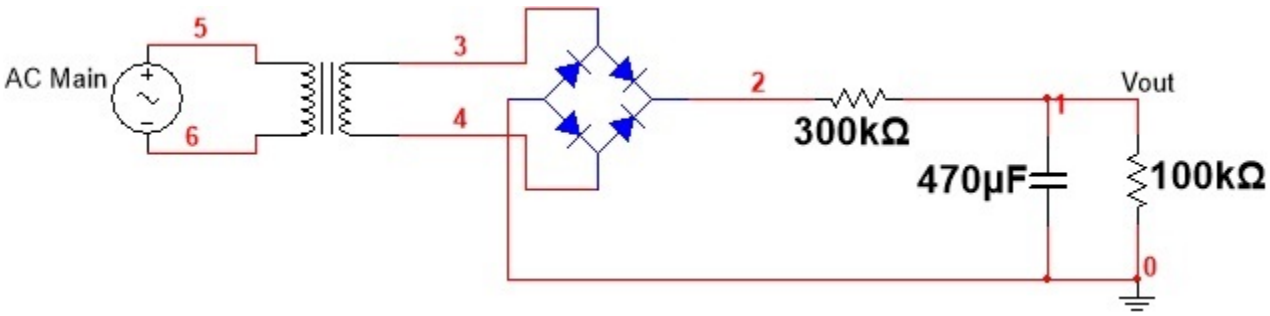

Figure 1: Schematic representation of full wave rectifier.