5/19/2022

EXPERIMENT NO.5

EC111

VISHAL KUMAR PRAJAPATI

ROLL NO. 2101227

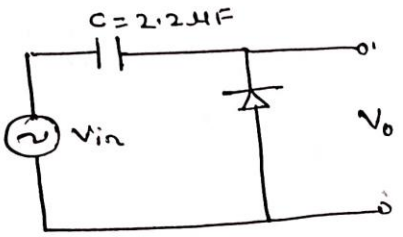
GOURP NO. 18

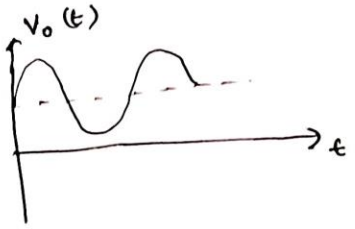
Name - Vishal Kumar Prajapati
Roll - 2101227
Grp. 18

Experiment-5

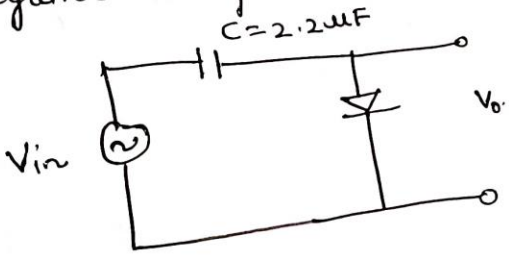
Aim: To study the characteristics of clamper circuit.

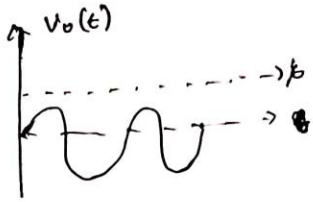
Positive clamper





Negative clamper





Verified
P. Mallick
19/05/22

EXPERIMENT NO. 5

OBJECTIVE:

- To study the characteristics of the Clamper circuit.

APPARATUS REQUIRED:

- A p-n junction diode
- 2.2microfarad capacitor
- Oscilloscope
- Function generator
- Diode

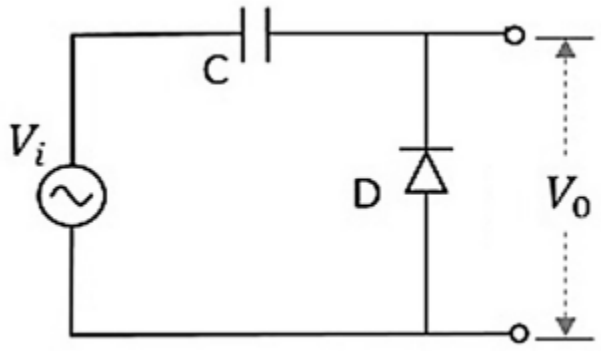
THOREY:

A Clamper Circuit is a circuit that adds a DC level to an AC signal. The positive and negative peaks of the signals can be placed at desired levels using the clamping circuits. As the DC level gets shifted, a clamper circuit is called a Level Shifter. Clamper circuits consist of energy storage elements like capacitors. A simple clamper circuit comprises a capacitor, a diode, a resistor, and a dc

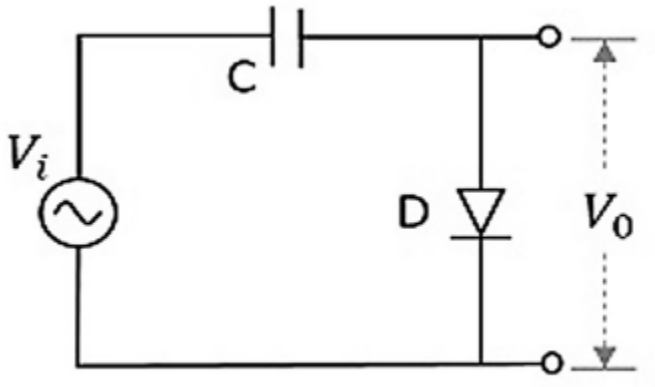
battery if required. A Clamper circuit can be defined as a circuit that consists of a diode, a resistor, and a capacitor that shifts the waveform to the desired DC level without changing the actual appearance of the applied signal.

CIRCUIT DIAGRAM:

POSITIVE CLAMPER:

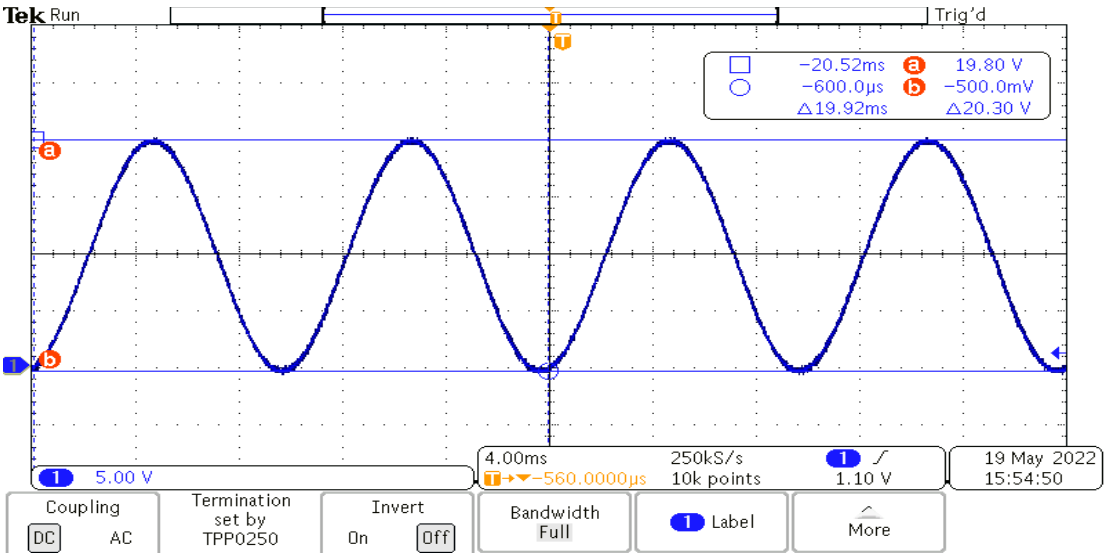


NEGATIVE CLAMPER:

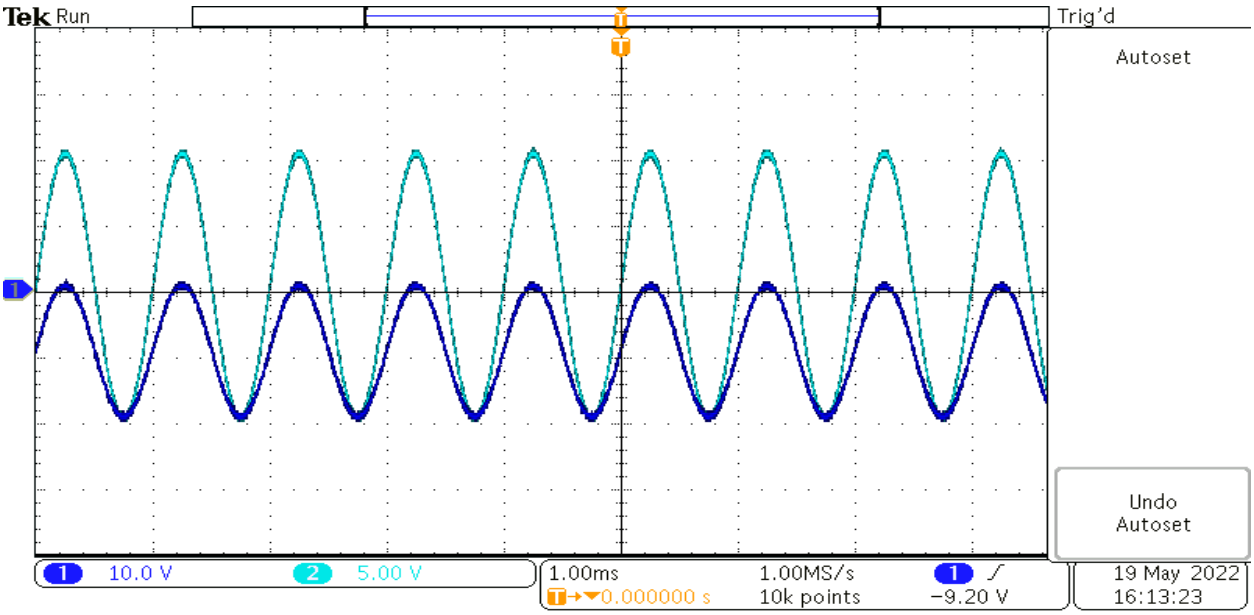


OBSERVATIONS:

POSITIVE CLAMPER:



NEGATIVE CLAMPER:



RESULT:

The output of the clamper circuit is observed.

PRECAUTIONS:

- Circuit must be complete with proper wiring.
- Circuit should not be shorted.

Input voltage must not exceed the maximum value to avoid damage