

# Module Content, Exercises and Assessments

## Lab Overview

In this lab, you will examine a diode's main characteristics and functions, as well as some of its notable uses in the real world.

First, you will look at the basic function of a diode and use simulation and circuit-building to observe its current-limiting behavior. Then, you will explore how it can be used in a clipper circuit.

In Section 2, you will learn about a diode's use in a half-wave rectifier and then you will build one yourself.



Figure 1: Diodes

## Learning Objectives

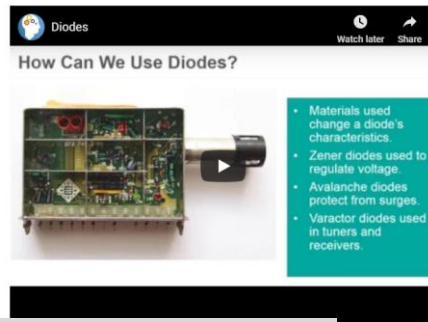
After completing this lab, you will be able to complete the following activities:

1. Discuss the operation and application of a diode.

Plot the forward and reverse voltage curves first through simulation and then validate it through instrumentation.

## Text Content

## Theory and Background



**Videos** can be played within the content window, or maximized to full screen

1-6 Do they have the same general shape?

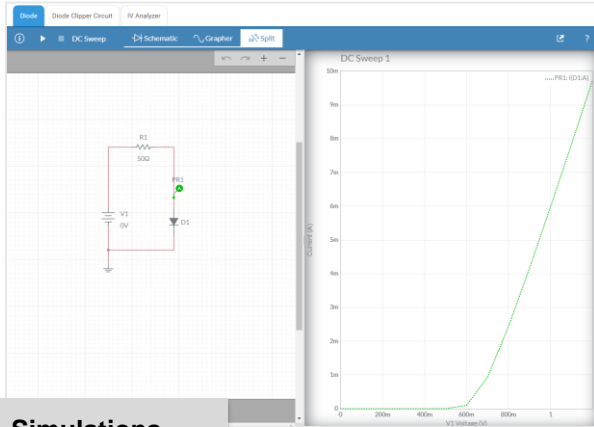
SUBMIT

**Questions** can be short answer, long answer, upload, freeform or table (see **Inline Assessments** for more details)

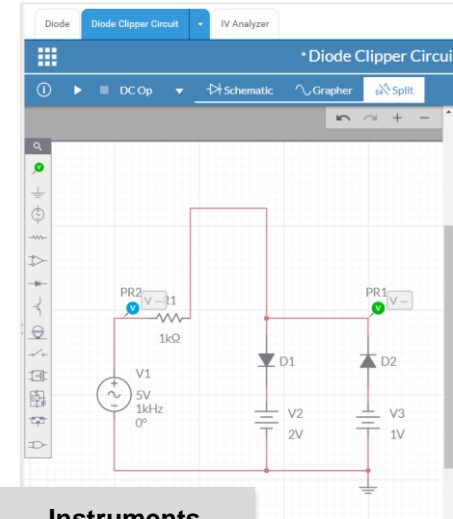


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EDUCATION

# Module Content, Exercises and Assessments



**Simulations**



**Instruments**

Using NI ELVIS III	Reference and Support
Getting Started	Forums
Understanding the Device	Teaching Resources
Using the Instruments	NI ELVIS III Manual
Using the Control I/O	

**Reference and Support**