

Week 3: Transducers

It is **HIGHLY RECOMMENDED** that you read through this week's lab and familiarize yourself with all the material before attending the lab session—there is a lot of content in this week's lab and understanding the material is critical for success!

Week 3 Prelab

Briefly answer the following questions.

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1. Draw the circuit schematic symbol of a diode and label the anode and cathode.



2. When a diode is forward biased, the anode is at a (circle one) higher / lower voltage than the cathode.

3. When looking at the diode itself, what are the two methods for telling which side of an LED is the anode and which side is the cathode?

- LOOK AT THE OUTER CASING OF THE LED, THE CATHODE PIN WILL BE THE PIN NEAREST TO THE FLAT EDGE ON THE CASING
- LOOK AT THE LED LEGS, THE LONGER LEGS WOULD IDENTIFY AS THE ANODE PIN

4. Fill in the blank: When a HIGH voltage relative to the EMITTER is applied to the BASE of an NPN transistor, current is allowed to flow from the COLLECTOR to the EMITTER.

Week 3 Prelab End