

# LED Basics

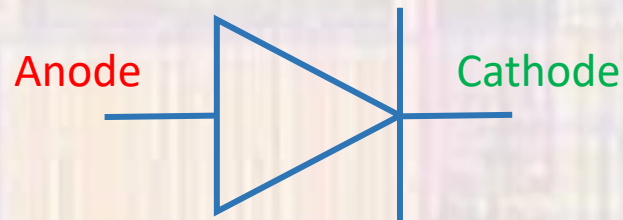
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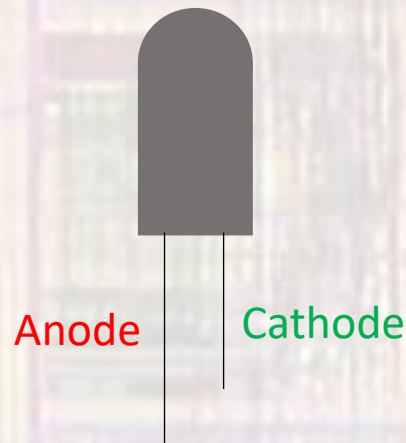
- Light Emitting Diode
  - Light is emitted from special diodes when they are sufficiently forward biased
  - No light is emitted if the forward bias (voltage) is below the diode turn on voltage
  - No light is emitted if the diode is reverse biased
  - Typical LED “turn on” voltage is 1.6v – 2.4v

# LED Basics

- Light Emitting Diode
- Schematic symbol



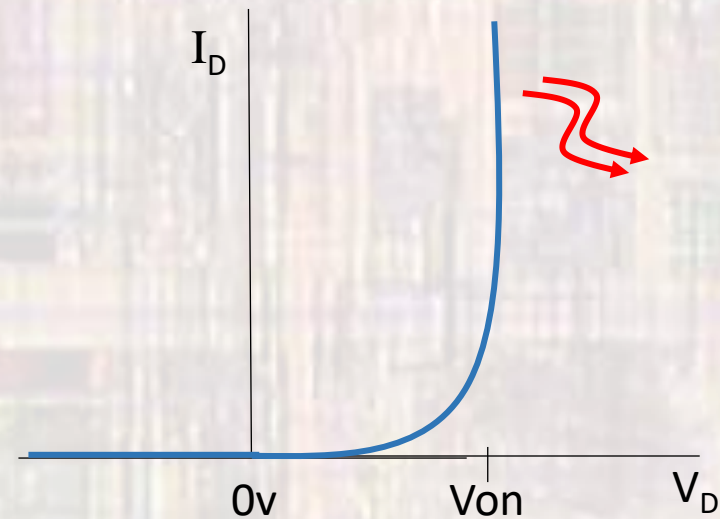
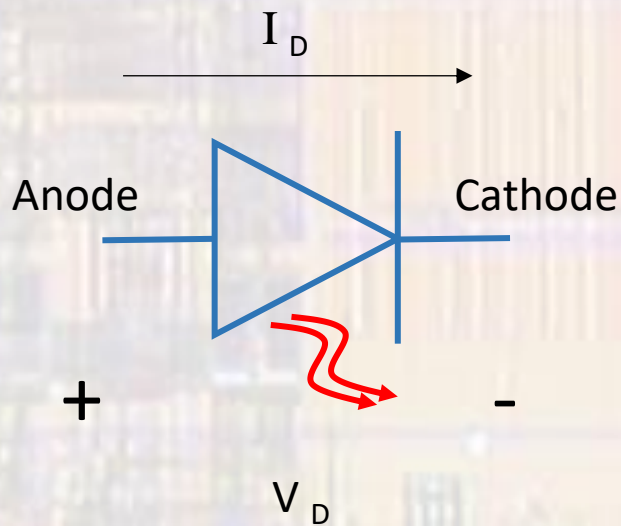
- Physical construction



# LED Basics

- Light Emitting Diode

- Operation



It requires a lot of current to have  $V_D$  greater than  $V_{on}$