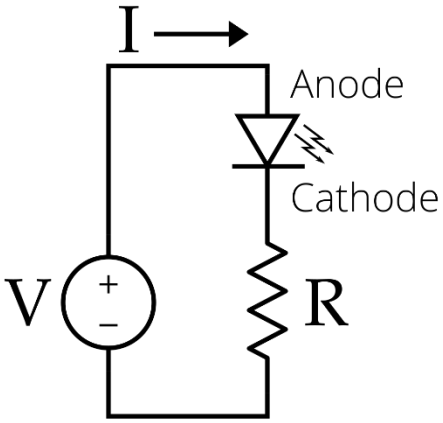
LED Quick-Start Guide

Basic Wiring:

In most cases, an LED requires a voltage source and a resistor in order to function well. As can be seen in the graph below, LEDs are very sensitive to changes in voltage, so a resistor is typically placed in series to control the current. The graph shows the general behavior of a typical LED, but you will need to determine how much current your LED can safely handle. This can usually be found on your LED spec sheet. If you have any questions, come to the Project Support Center.



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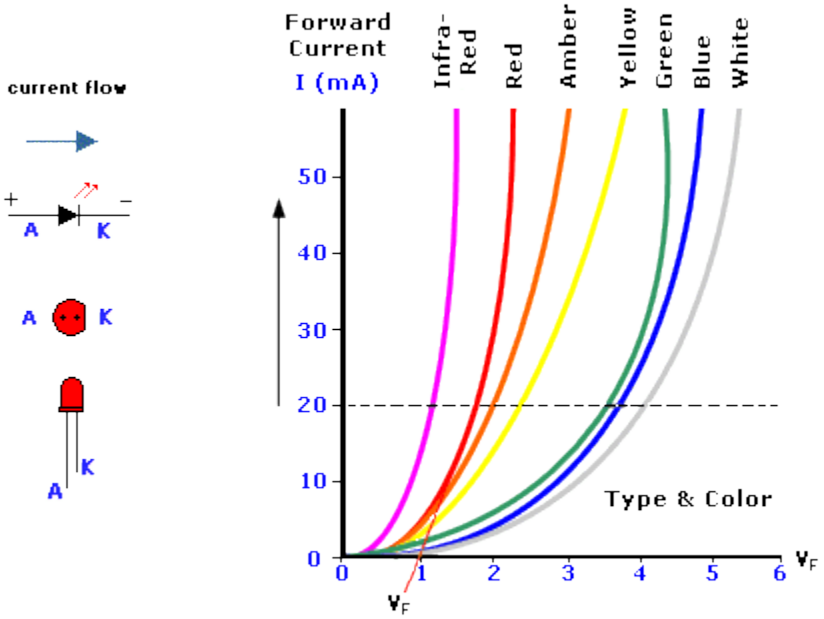

Fig. 13 -- LED Pin Configuration and Color Chart

To determine the value of the resistor, you can use the following equation:

$$R = \frac{V_s - V_f}{I}$$

V_f = LED Voltage
V_s = Supply Voltage

Tips and Troubleshooting:

- **DO NOT** attach an LED directly to a power source unless you are confident it can handle the full voltage.
- **If an LED is not working,** first check the voltage drop across the LED. Make sure it is high enough, and that the LED is not backwards. (An LED in reverse acts like a diode and blocks current). Next, verify that your resistor has an appropriate value.