

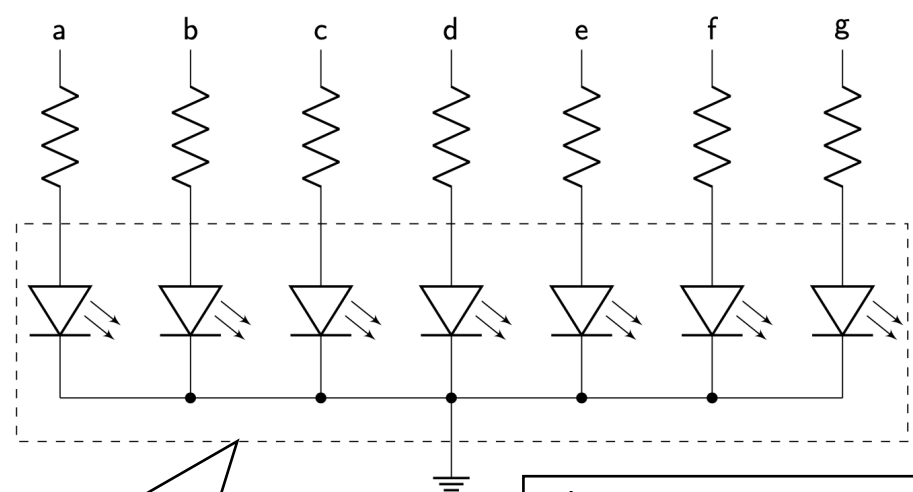
## WHAT TO DO

One current-limiting resistor is required in **each** path containing an **LED**! This means a 7-segment display requires seven current-limiting resistors.

## WHY WE DO IT

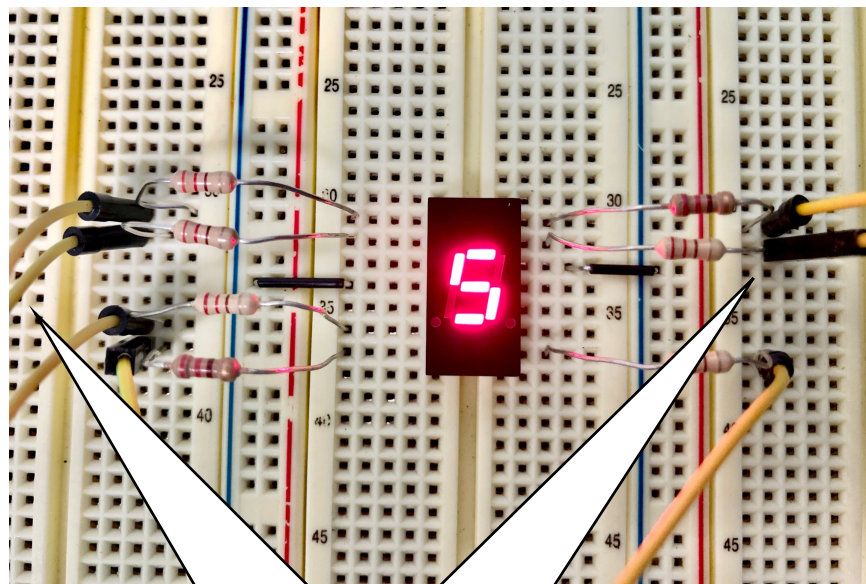
This ensures uniform brightness of each diode. Diodes are all slightly different and can act unpredictable if wired in parallel. Even if identical, display brightness will vary depending on how many segments are illuminated at once if wired in parallel.

## 7-SEGMENT DISPLAYS



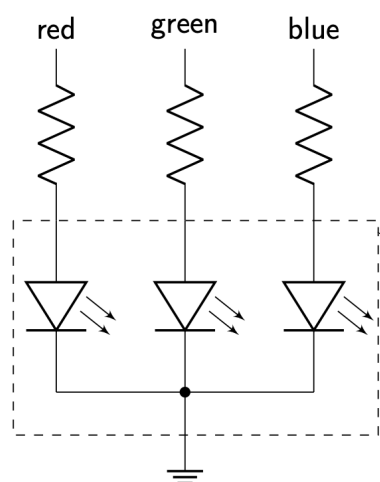
Dashed area indicates contents of the display package.

These are common-cathode displays. The same principle holds for common-anode displays.



The wires connect to individual signals for each segment.

## RGB LEDs



Dashed area indicates contents of the RGB led.

The wires connect to individual signals for each color.

