

# Diodes and Applications

## Diode Physics

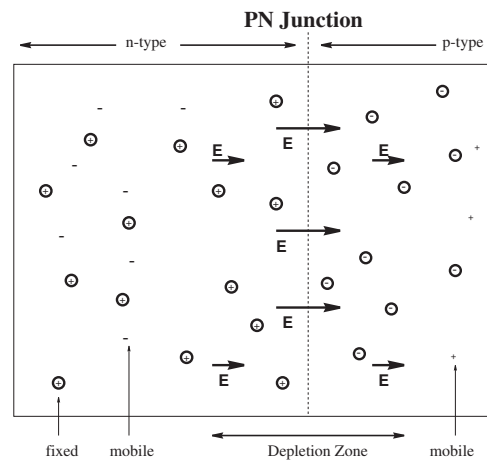


Figure 1: The depletion zone with fixed and mobile charges and the built-in electric field.

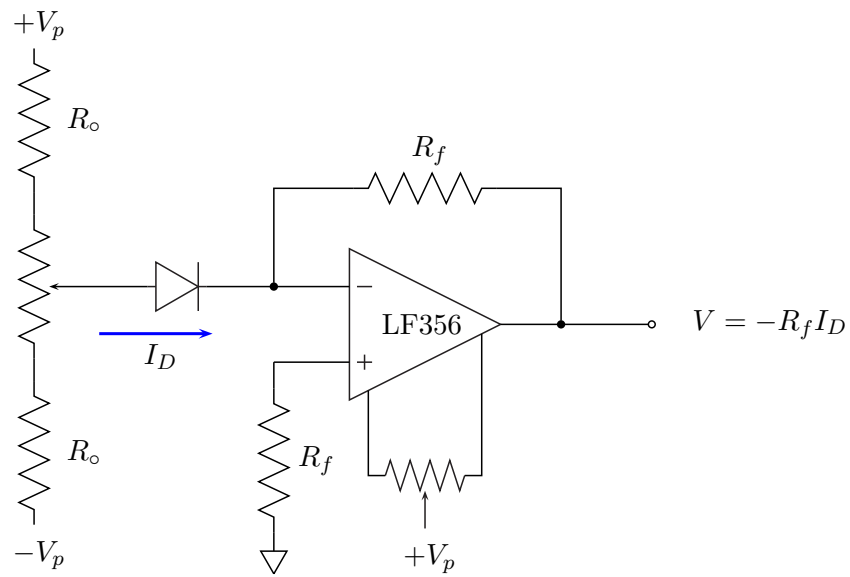


Figure 2: Measurement of the diode current under forward and reversed-biased conditions.

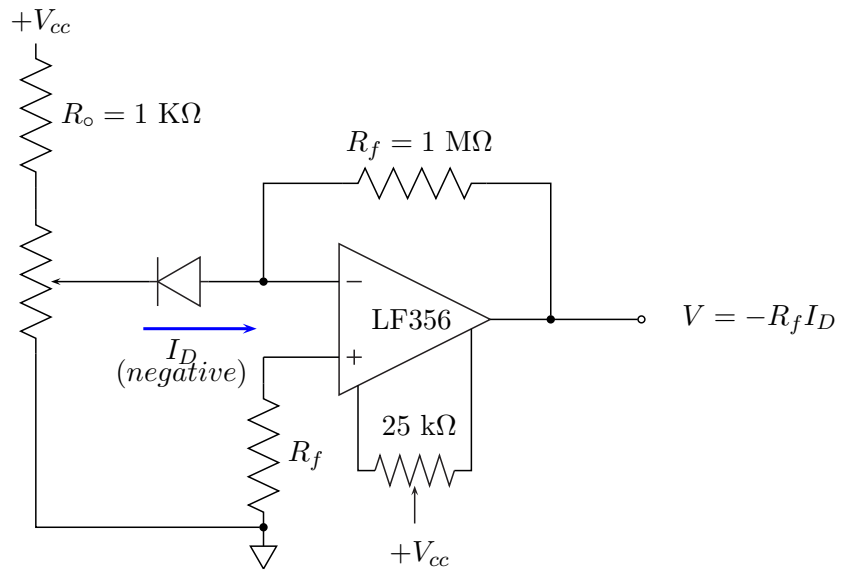


Figure 3: Measurement of the diode current under reversed-biased condition.

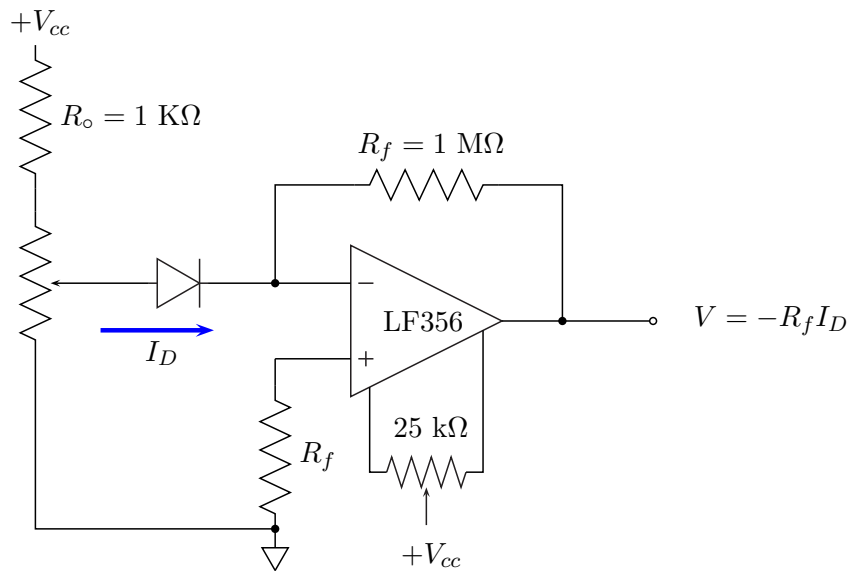


Figure 4: Measurement of the diode current under forward-biased condition.

## Diode Applications

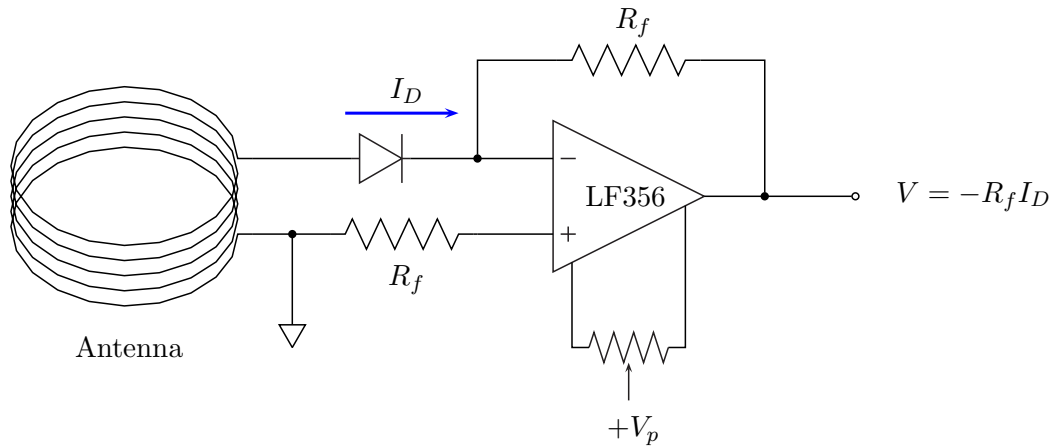


Figure 5: The diode as an RF detector.

## Photodiodes

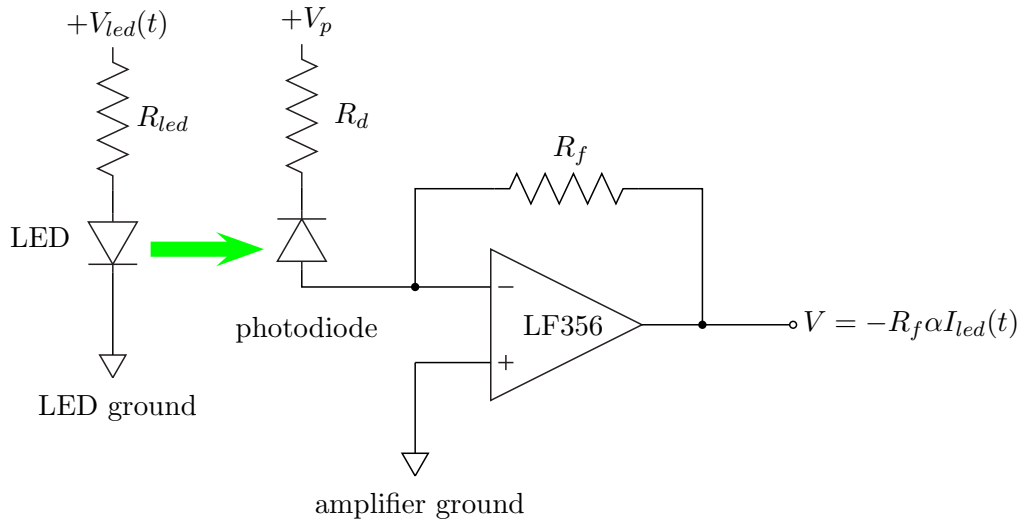


Figure 6: Detecting the signal from an LED with a photodiode.