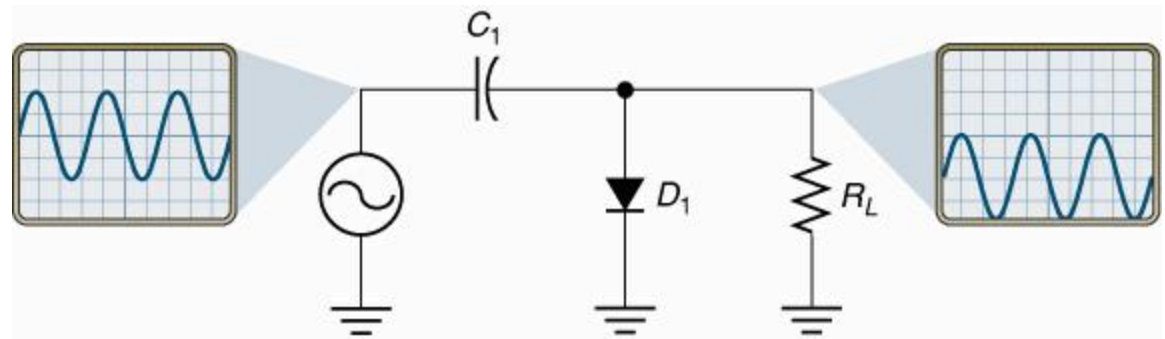
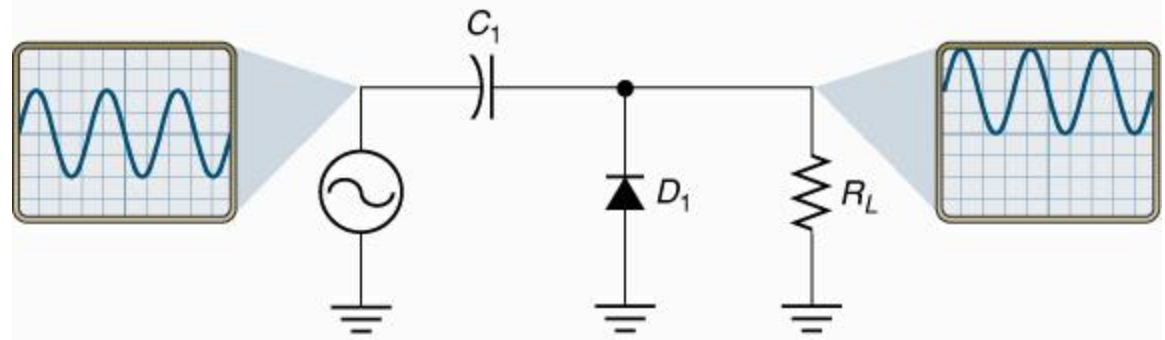


Diode Clampers

A clamper (or dc restorer) sets (or restores) the dc reference of a waveform.



(a) Negative clamper

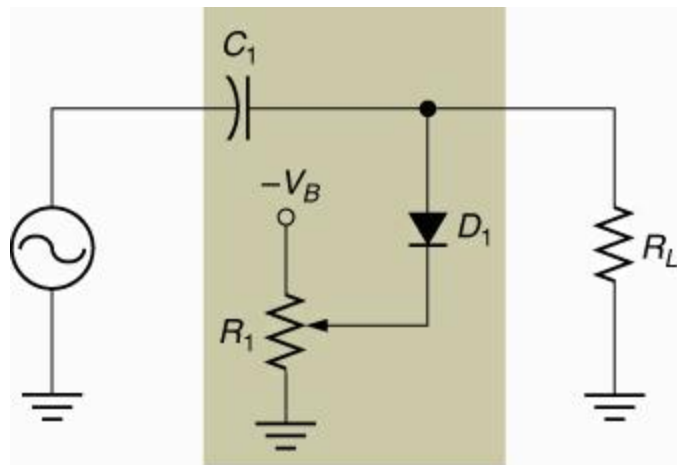


(b) Positive clamper

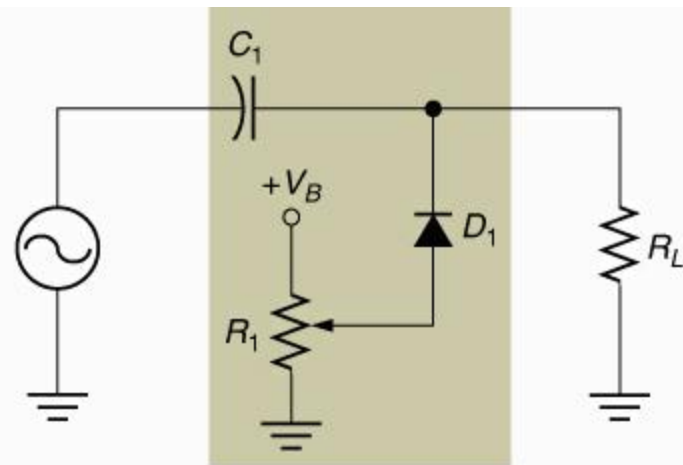
Biased clampers

Biased clampers allow a waveform to be shifted above or below a dc reference other than 0 V.

- The dc reference is determined by the biasing voltage (V_B) and the setting of the potentiometer (R_1).



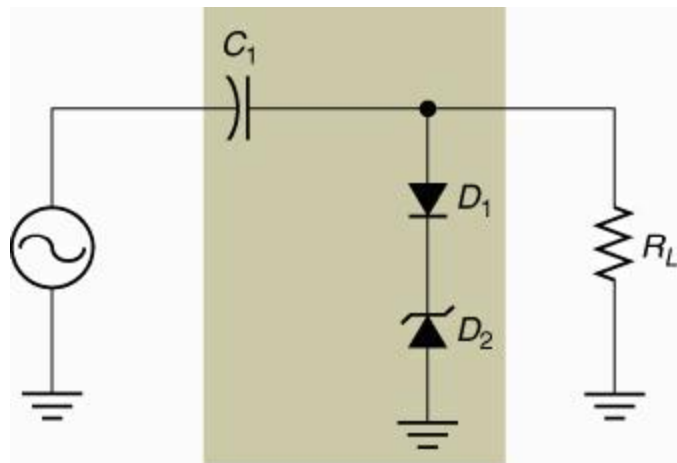
(a) Negative-biased clamper



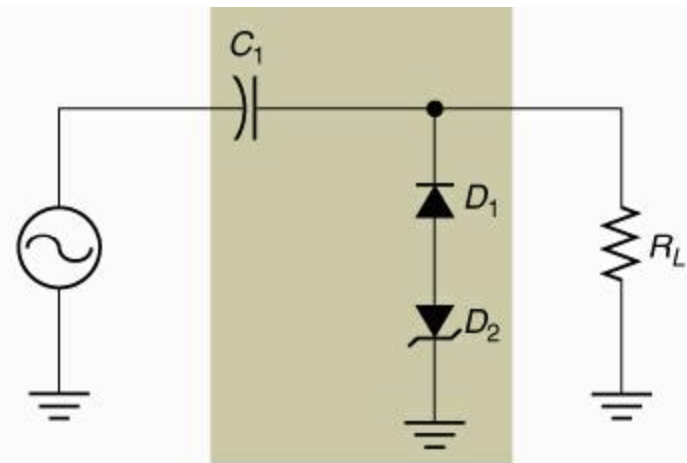
(b) Positive-biased clamper

Zener clampers

The diodes in (a) are in a common-cathode configuration. The diodes in (b) are in a common-anode configuration.



(a) Negative zener clamper



(b) Positive zener clamper