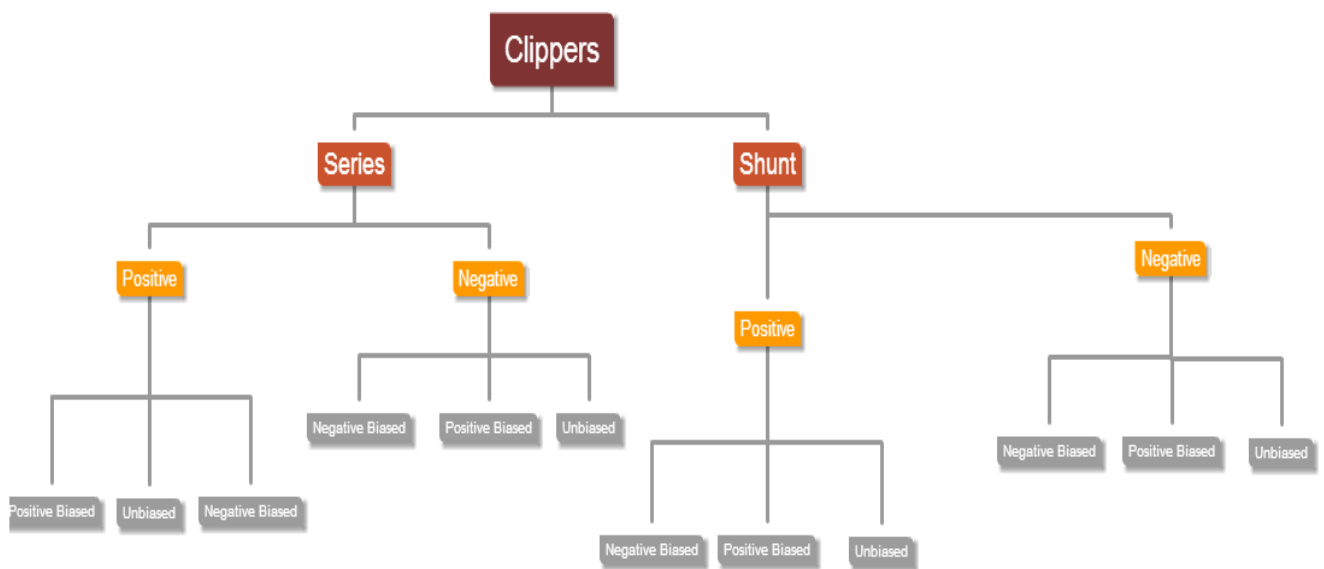


CLIPPER

Clippers are the diode circuit that clips off a portion of input wave without distorting remaining part of input signal.

Classification of clippers



Clippers are broadly categorized in two types “

(i) Series “ Diode is connected in series with resistor.

(ii) Shunt “ Diode is connected in parallel with resistor.

Positive clippers – They clip positive half cycle of input waveform.

Negative clippers “ They clip negative half cycle of input waveform.

Steps to analyze clipping circuits

(1) Divide the analysis into two parts – (i) Positive half cycle and (ii)

Negative half cycle

(2) Substitute the diode (ideal) with closed switch if forward biased or with open switch if reverse biased.

(3) If it is a biased circuit, then look for the effective polarity and apply that on the diode.

How to draw clippers?

Consider the condition of diode **during positive half cycle**. Its trick to help you draw any clipper easily.

(i) For **Series, Positive** clippers – diode must be **reverse biased**.

For **Negative** clippers – diode must be **forward biased**.

(ii) For **Shunt, Positive** clippers – diode must be **forward biased**.

Negative clippers – diode must be **reverse biased**.

Source: <http://www.knowelectronics.org/what-is-clipper-circuit/>