# AMPLITUDE SHIFT KEYING

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## DESCRIPTION:

Amplitude shift keying is a form of amplitude modulation which represents digital data as variation in the amplitude of carrier waveform. Its consists of transistor and resistor. An input sine wave is connected in collector terminal and square wave in base terminal and output was taken across emitter terminal of a transistor. If the carrier signal is 1 then the sine waveform shifts to output, when the carrier signal is 0 then the sine waveform disabled at an output. They are used in television, satellite etc., The main characteristics of Amplitude shift keying is pulse shaping.

## SCHEMATIC DIAGRAM:

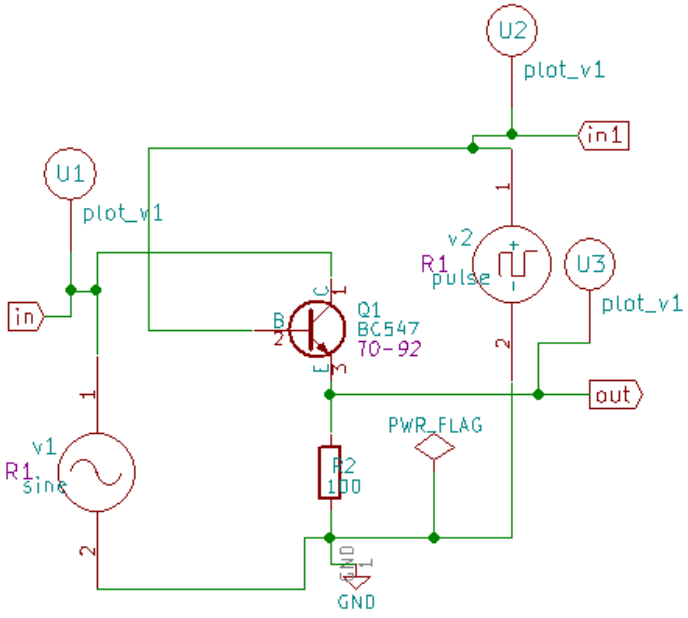


Figure1: Schematic diagram of ASK

## Ngspice plot:

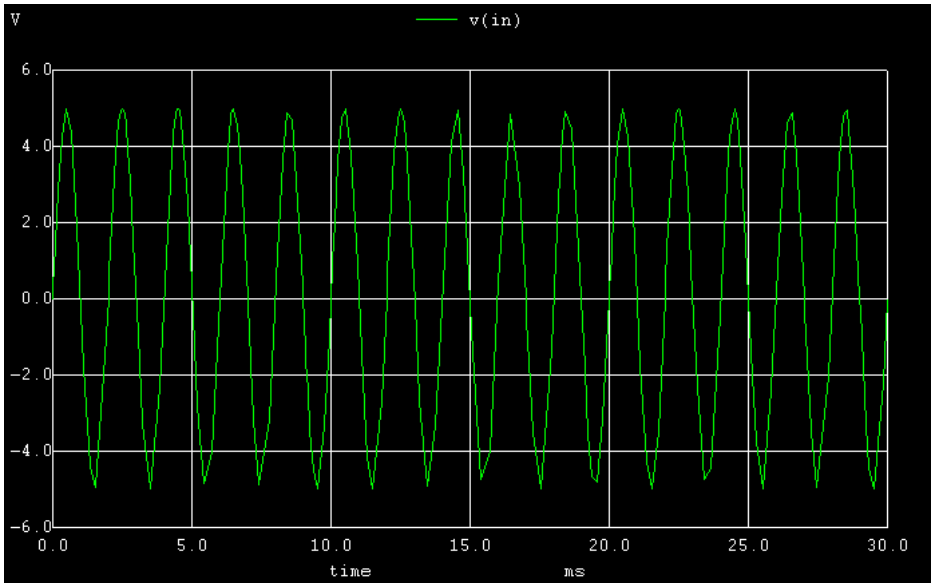


Figure 2: Ngspice input plot 1

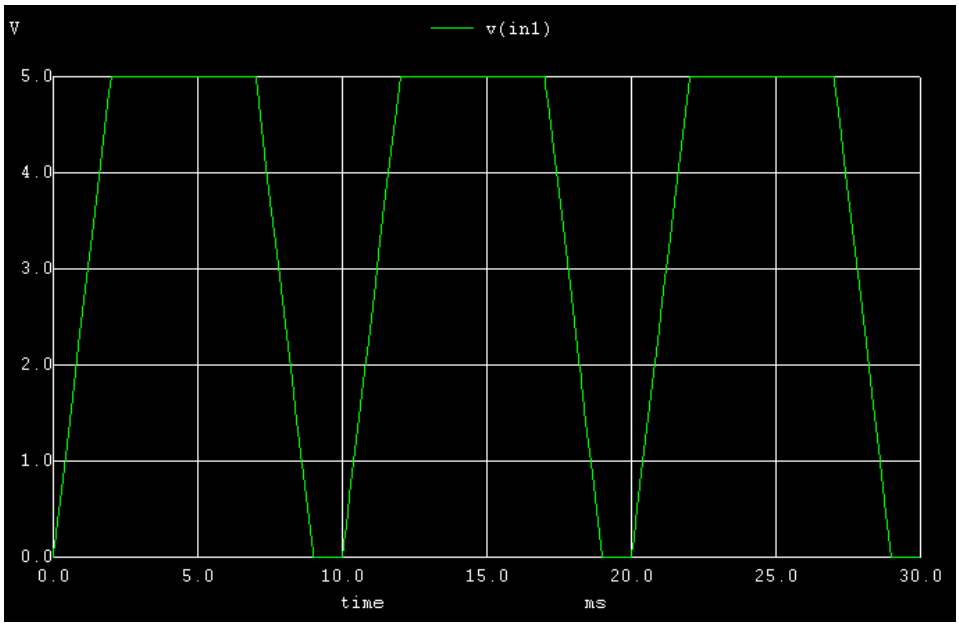


Figure 3: Ngspice input plot 2

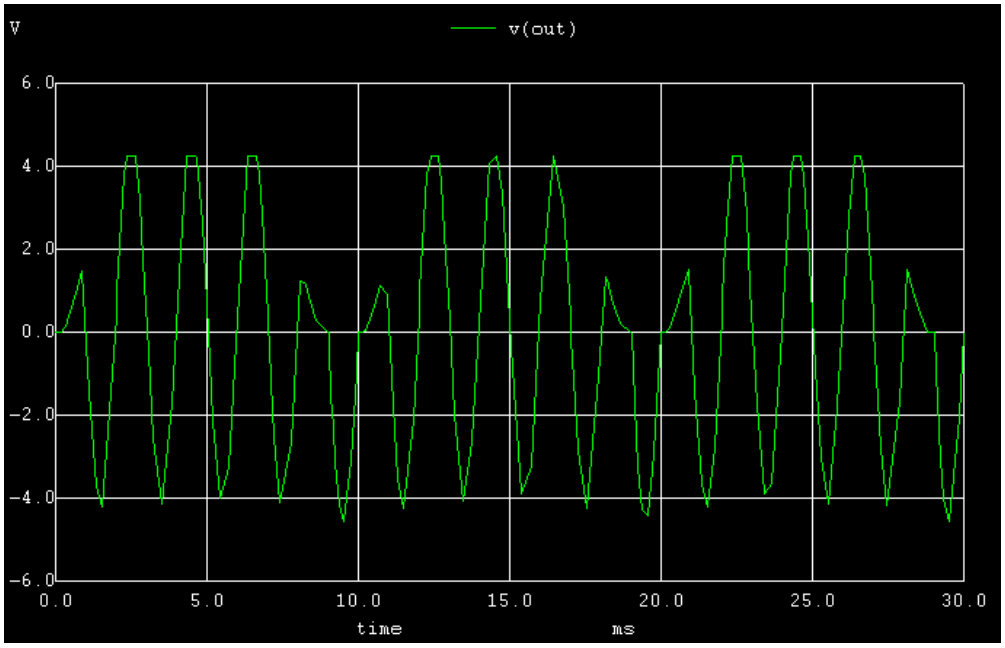


Figure 4: Ngspice output plot

## Python plot:

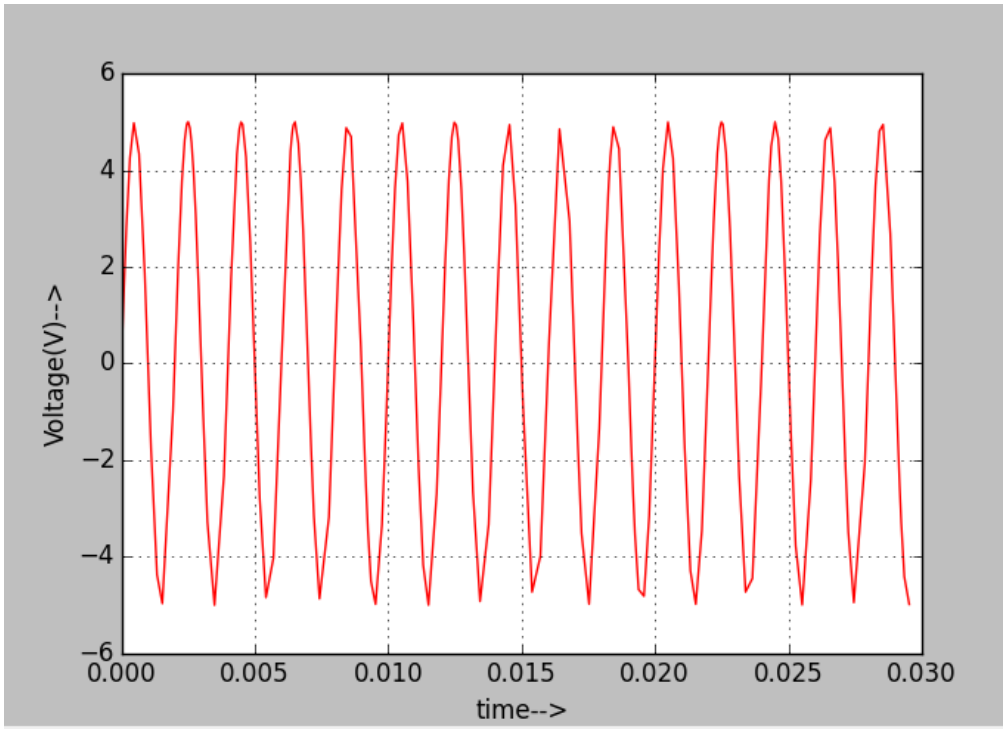


Figure 5: Python input plot 1

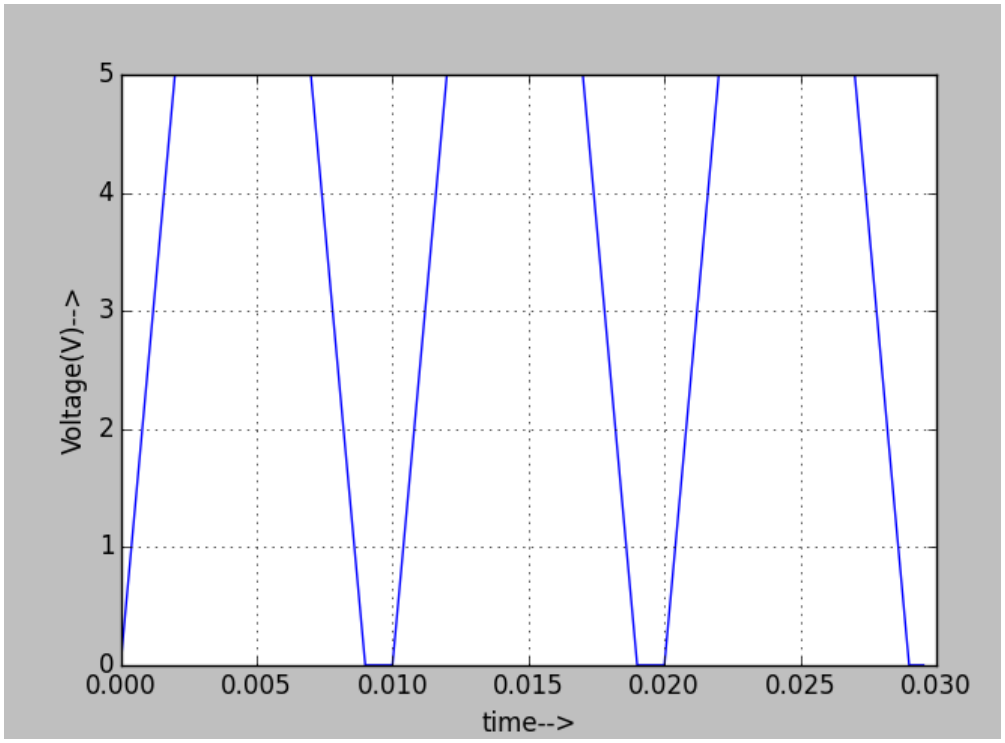


Figure 6: Python input plot 2

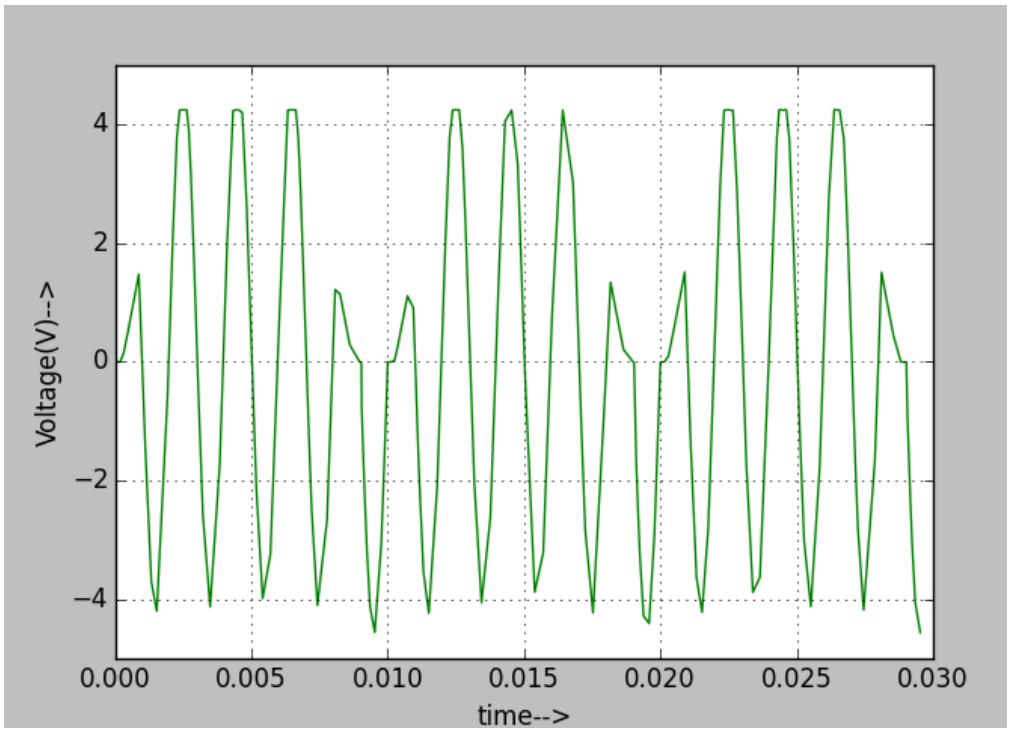


Figure 7: Python output plot

## RESULT:

Thus the Amplitude shift keying was designed and implemented using eSim software and I got the appropriate input and output waveform.

## REFERENCE:

http://www.evalidate.in/lab3/pages/ASK/ASK_T.html