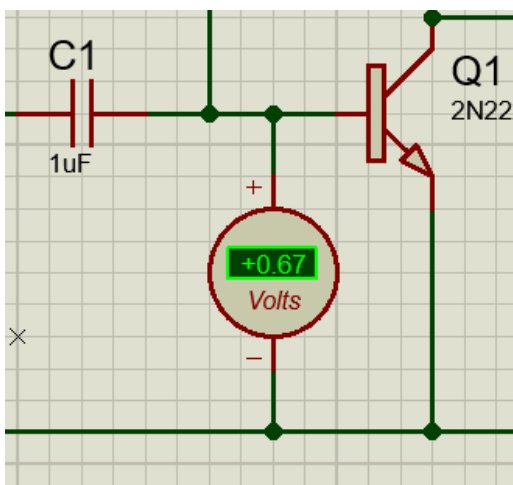
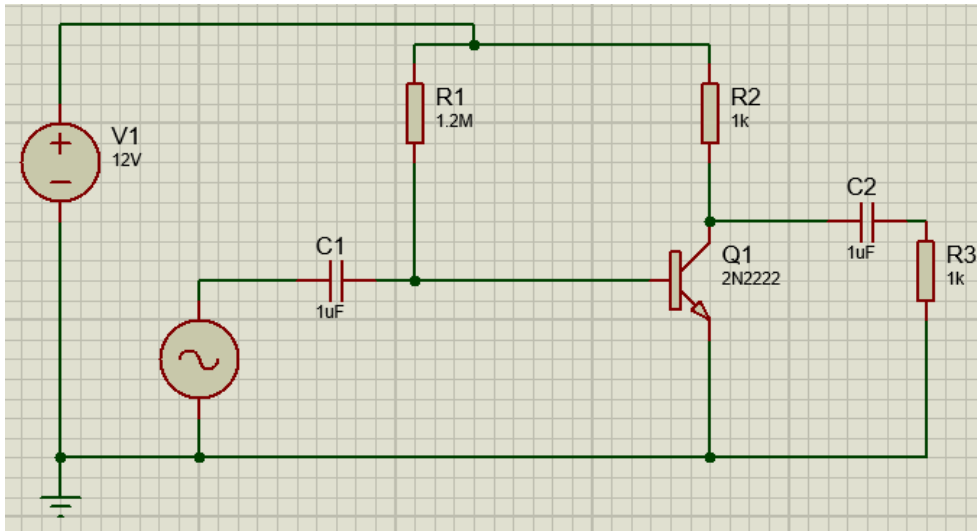


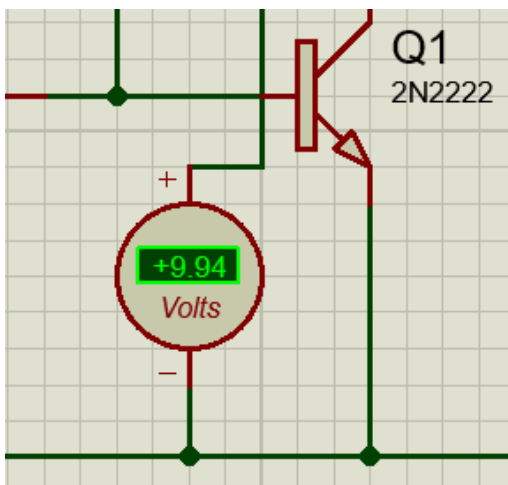
SIMULACIONES PRÁCTICA 04 – CIRCUITOS DE POLARIZACIÓN CON BJT Y FET

3.1 CIRCUITO DE POLARIZACIÓN FIJA DEL TRANSISTOR BIPOLAR.

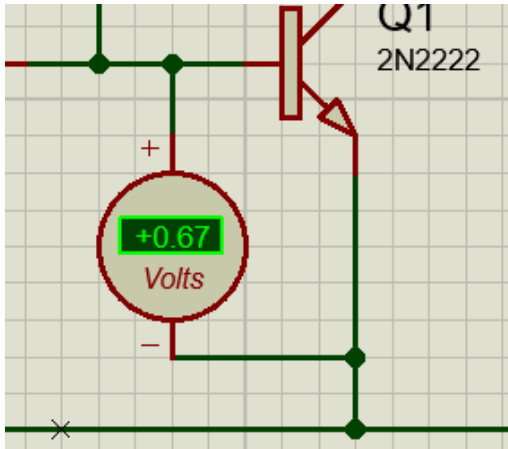
2N2222



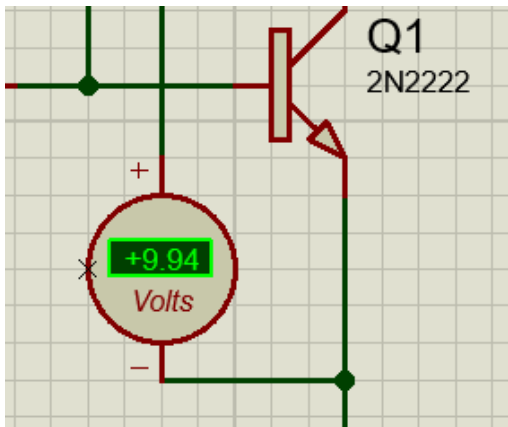
VB



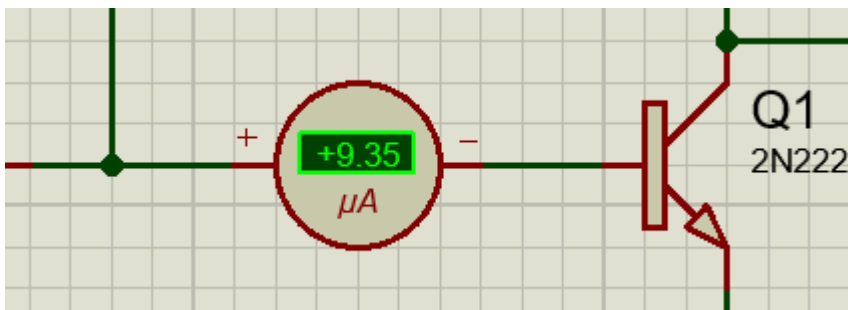
VC



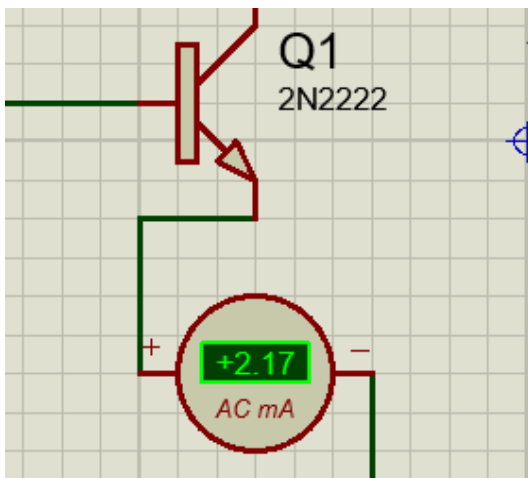
V_{BE}



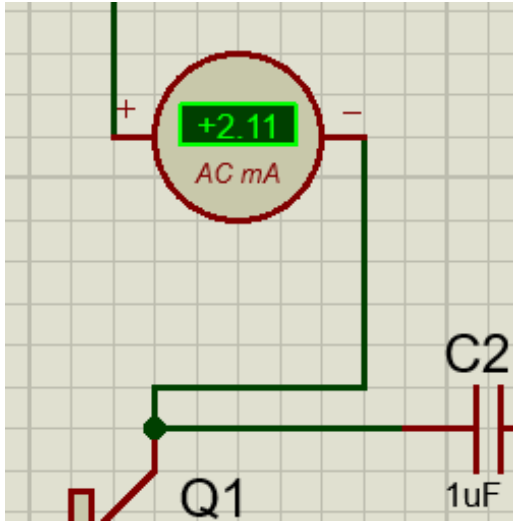
V_{CE}



I_B

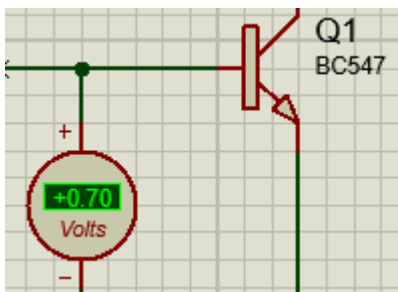
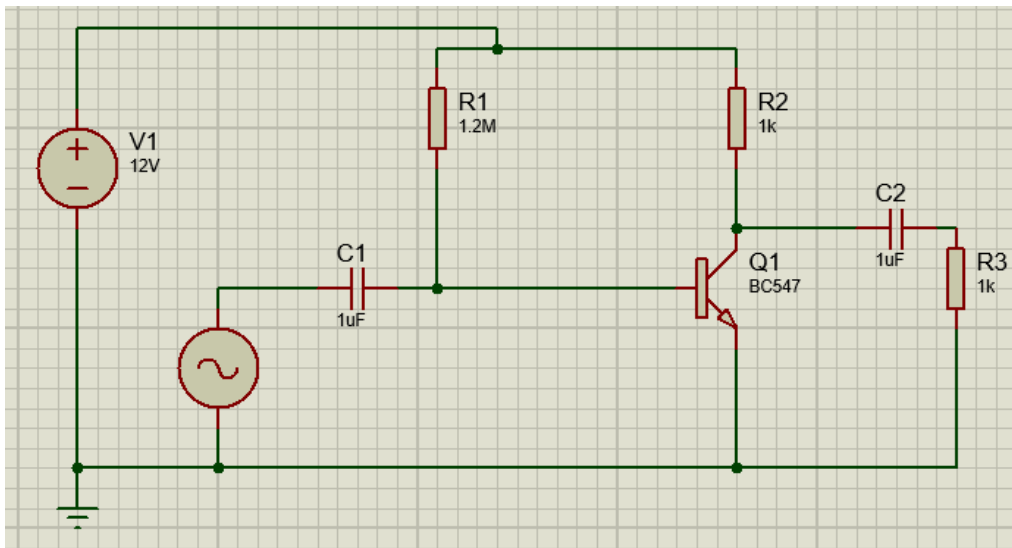


I_E

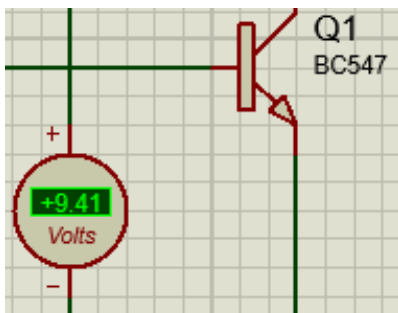


IC

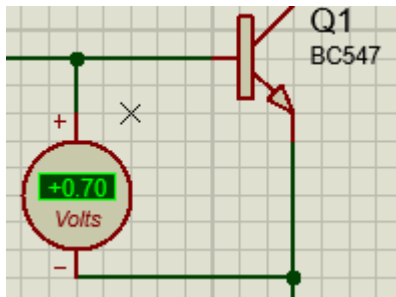
BC547C



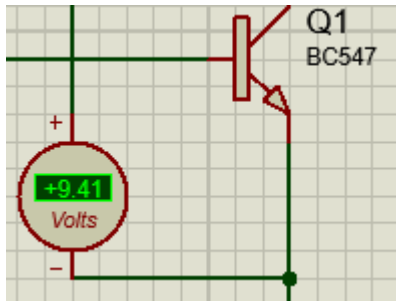
VB



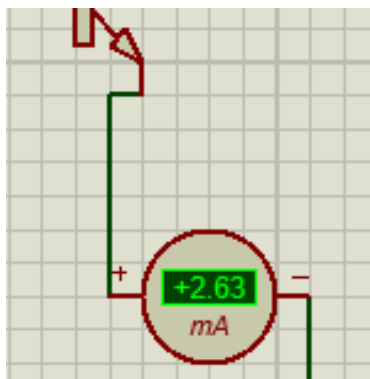
VC



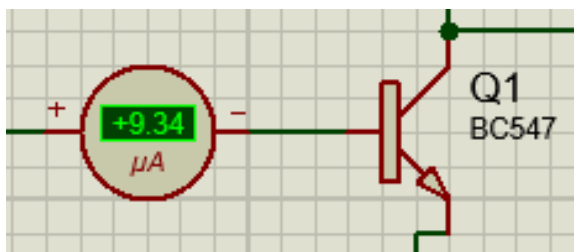
V_{BE}



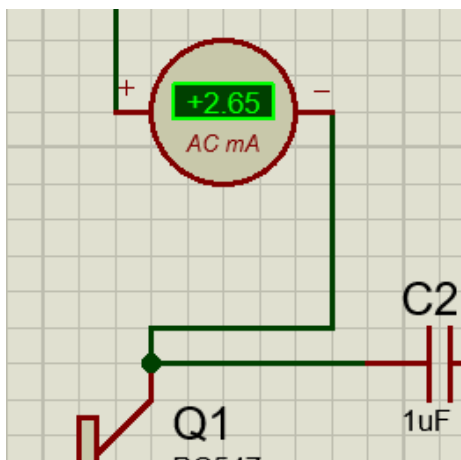
V_{CE}



I_E



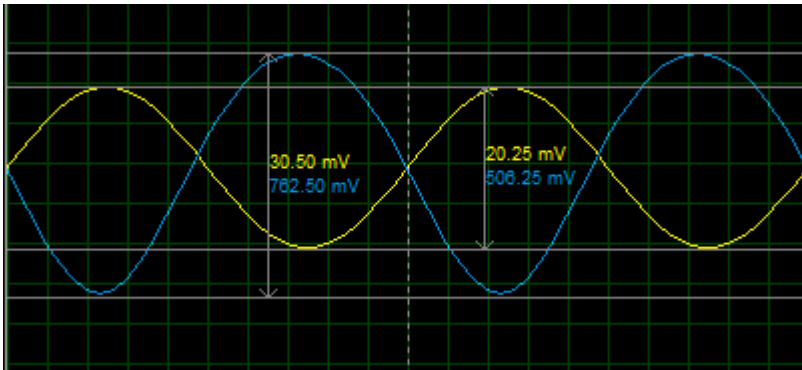
I_B



I_C

3.1.2 MEDICIONES DE LA AMPLIFICACIÓN DE SEÑALES

2N2222



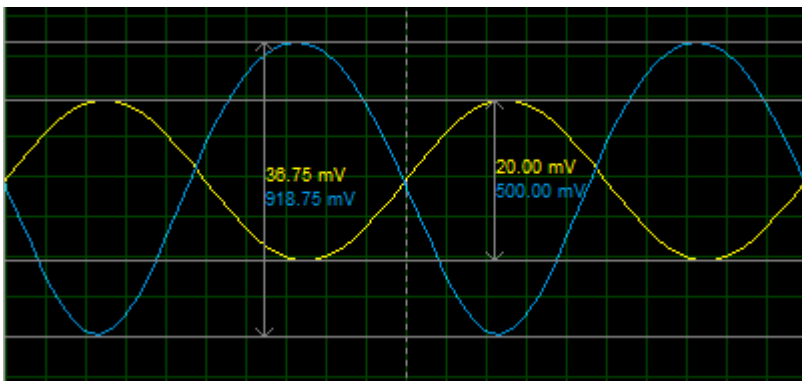
CANAL 1 : V_i

CANAL 2 : V_o

0.13v/div Canal 2 (azul)

5mv/div Canal 1 (amarillo)

BC547C



CANAL 1 : V_i

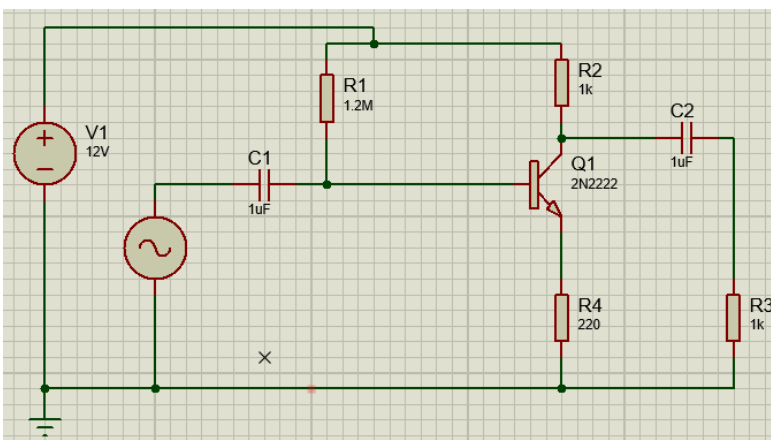
CANAL 2 : V_o

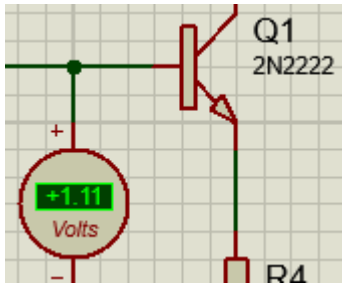
0.13v/div Canal 2 (azul)

5mv/div Canal 1 (amarillo)

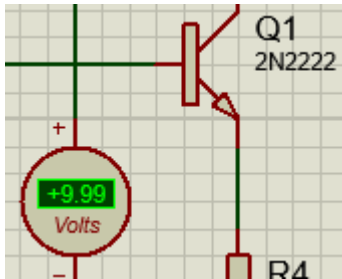
3.2 CIRCUITO DE POLARIZACIÓN ESTABILIZADO EN EMISOR DEL TRANSISTOR BIPOLAR.

2N2222

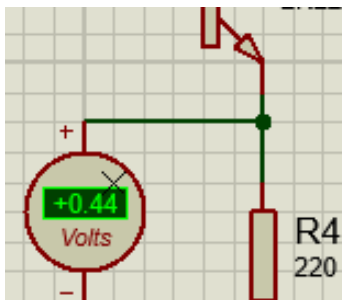




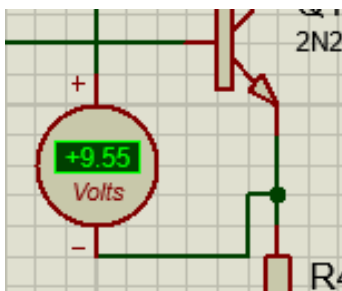
VB



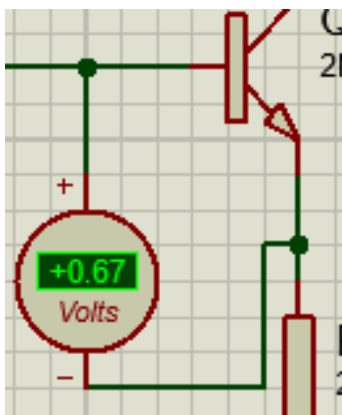
VC



VE



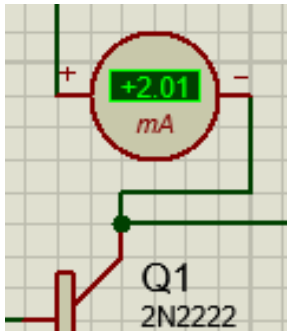
VCE



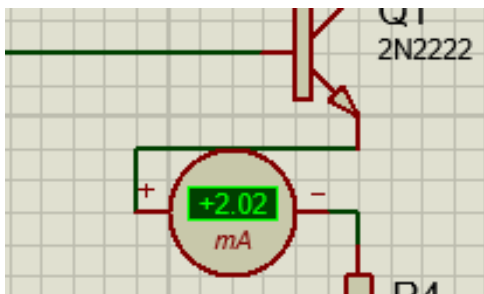
VBE



I_B

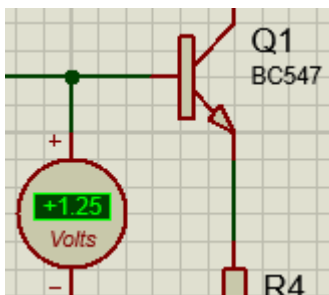
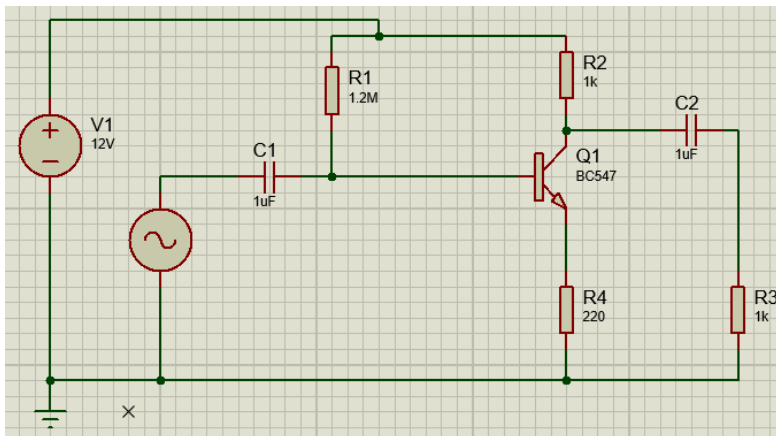


I_C

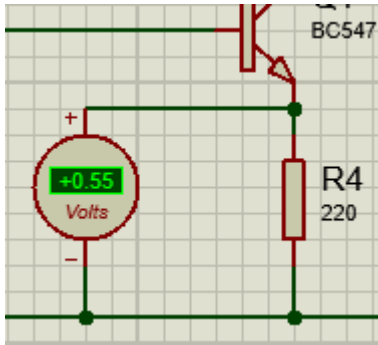


I_E

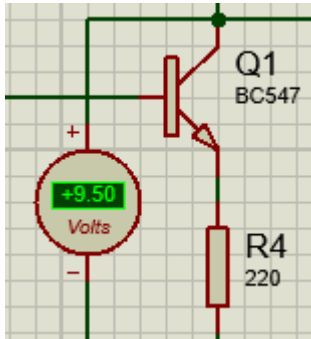
BC547C



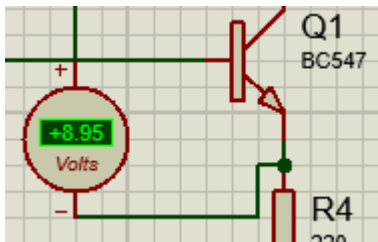
V_B



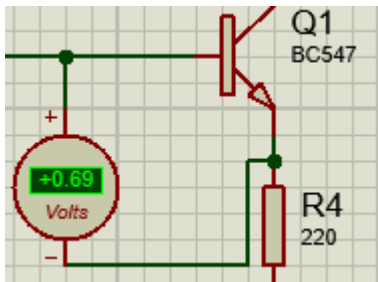
VE



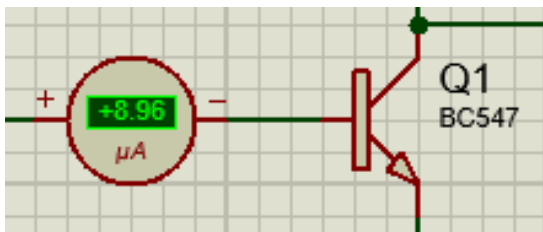
VC



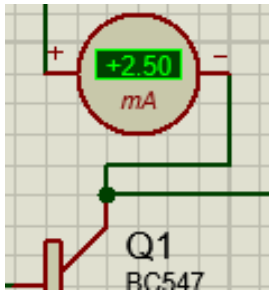
VCE



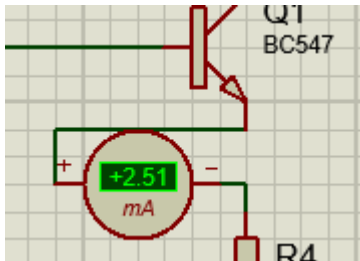
VBE



IB



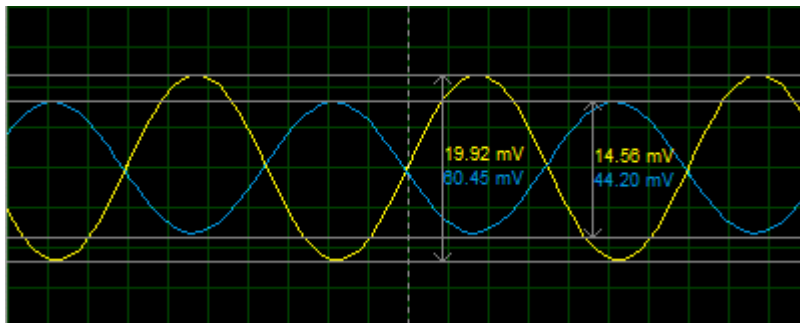
I_C



I_E

3.2.2 MEDICIONES DE LA AMPLIFICACIÓN DE SEÑALES

2N2222



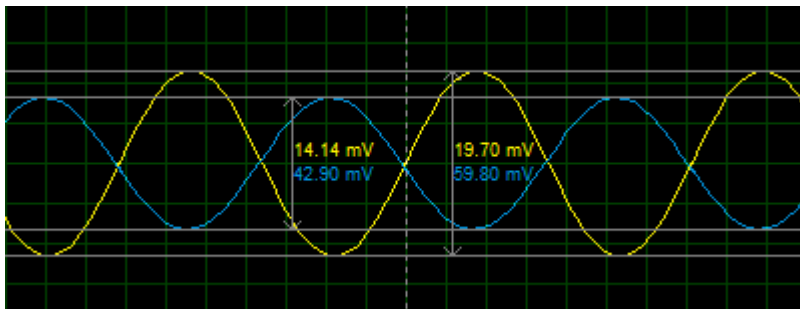
CANAL 1 : V_i

CANAL 2 : V_o

13mv/div Canal 2 (azul)

4.28mv/div Canal 1 (amarillo)

BC547C



CANAL 1 : V_i

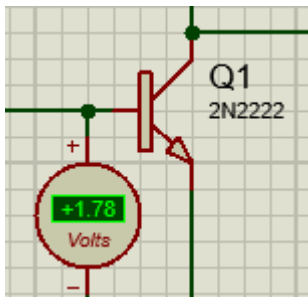
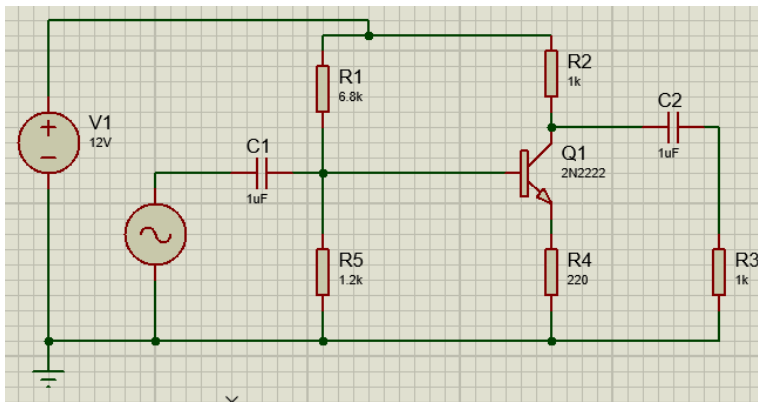
CANAL 2 : V_o

13mv/div Canal 2 (azul)

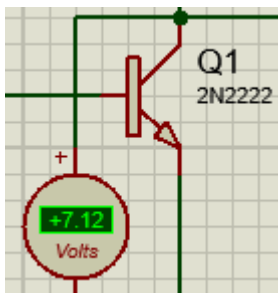
4.28mv/div Canal 1 (amarillo)

3.3 CIRCUITO DE POLARIZACIÓN POR DIVISOR DE VOLTAJE DEL TRANSISTOR BIPOLAR.

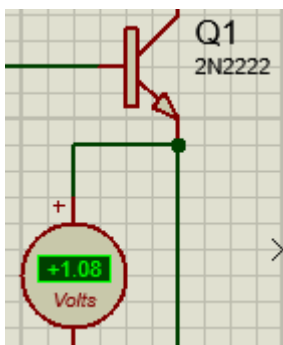
2N2222



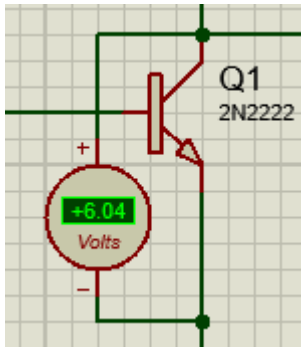
V_B



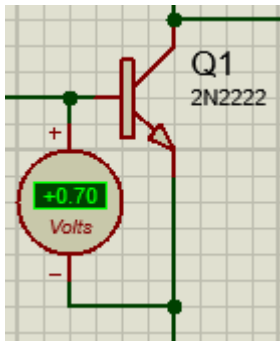
V_C



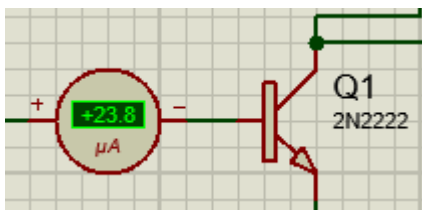
V_E



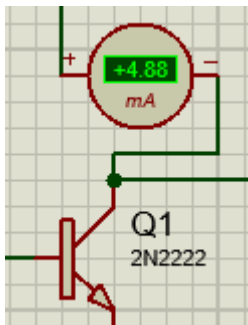
V_{CE}



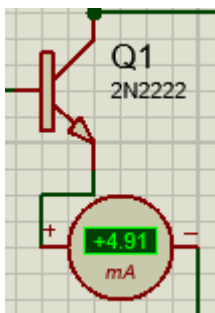
V_{BE}



I_B

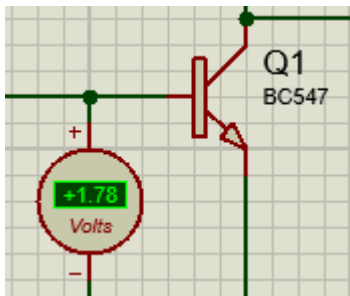
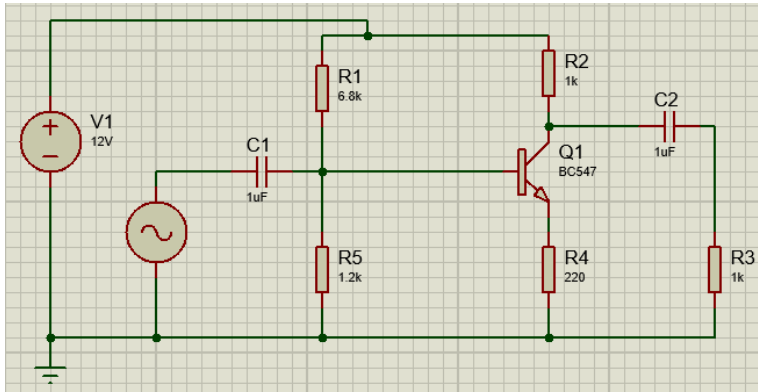


I_C

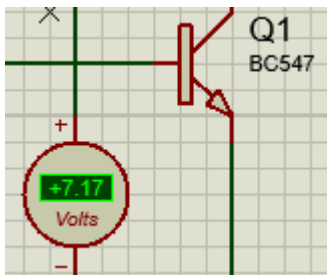


I_E

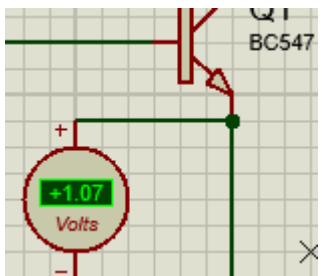
BC547C



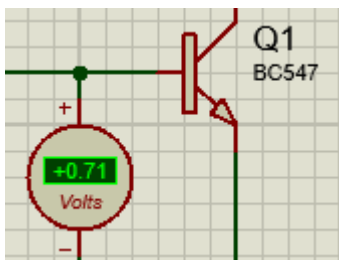
VB



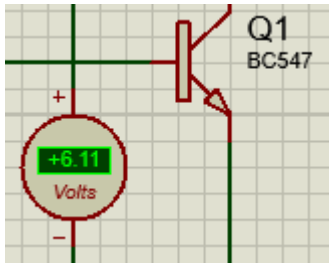
VC



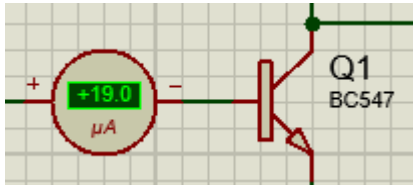
VE



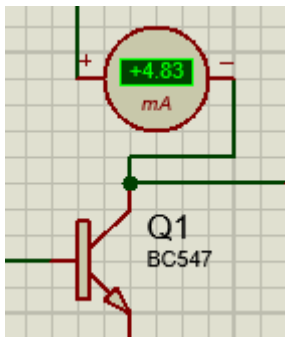
VBE



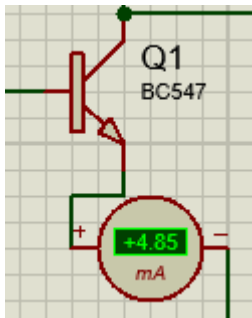
VCE



IB



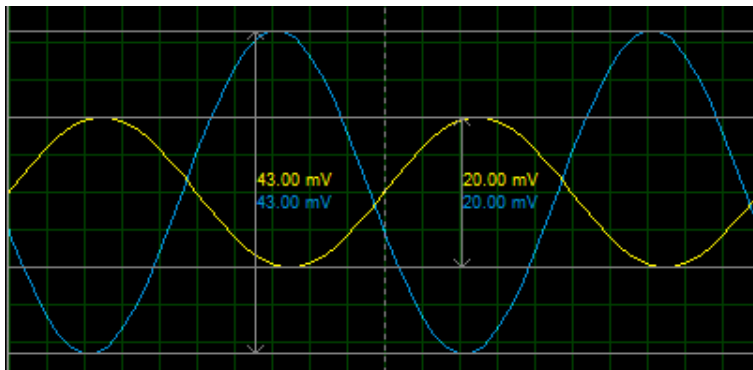
IC



IE

3.3.2 MEDICIONES DE LA AMPLIFICACIÓN DE SEÑALES

2N2222



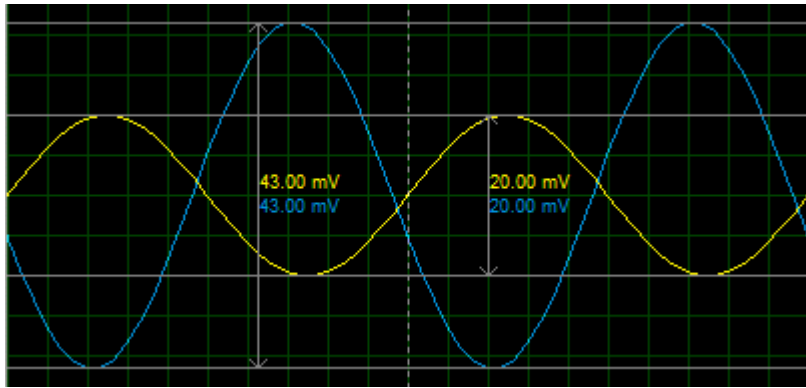
CANAL 1 : Vi

CANAL 2 : Vo

5mv/div Canal 2 (azul)

5mv/div Canal 1 (amarillo)

BC547C



CANAL 1 : V_i

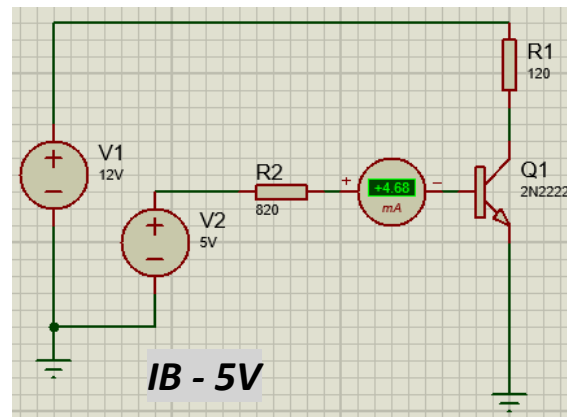
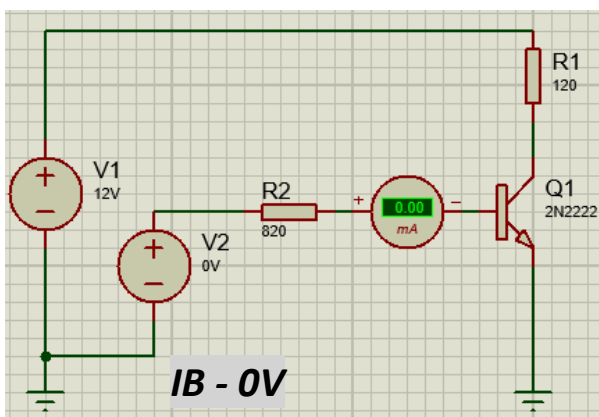
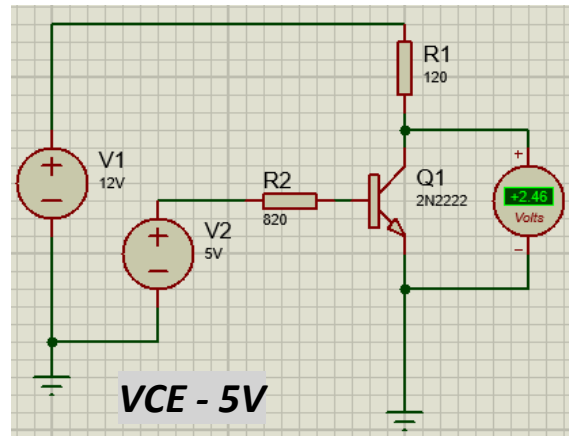
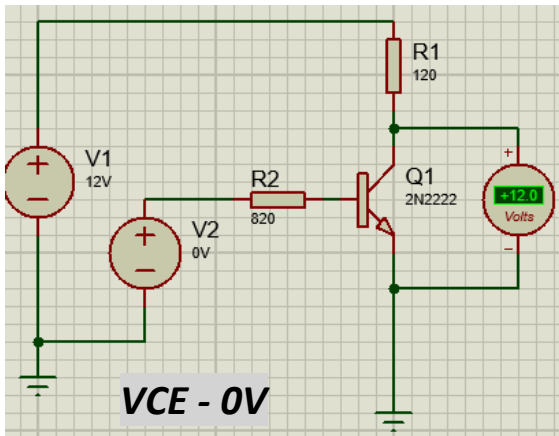
CANAL 2 : V_o

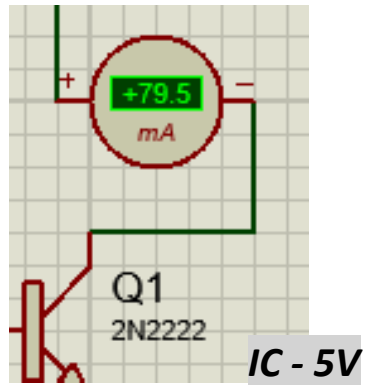
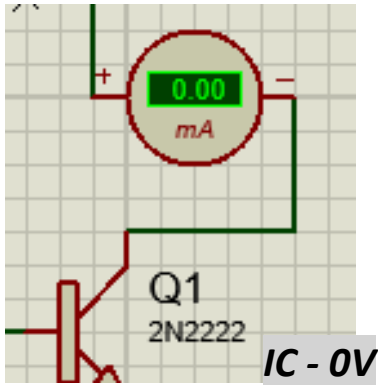
5mv/div Canal 2 (azul)

5mv/div Canal 1 (amarillo)

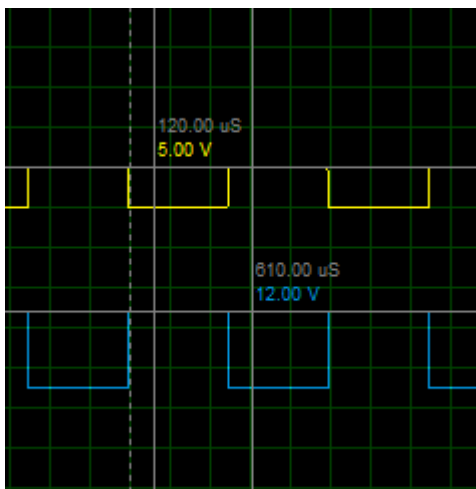
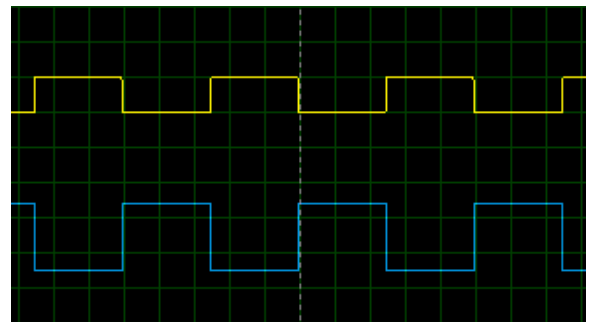
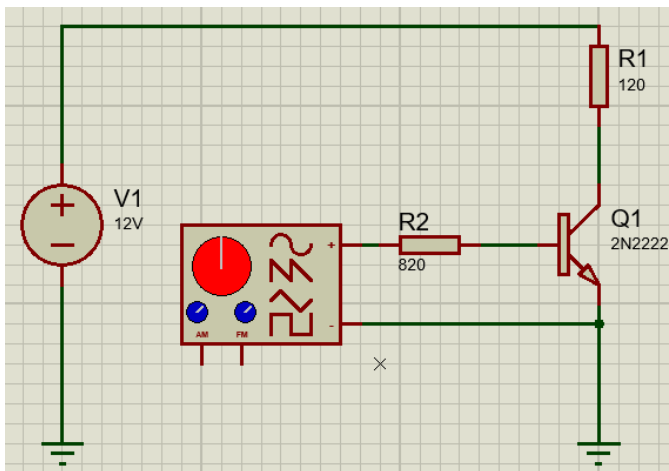
3.4 ANÁLISIS DEL TRANSISTOR BIPOLAR EN CORTE Y SATURACIÓN.

A)





B)

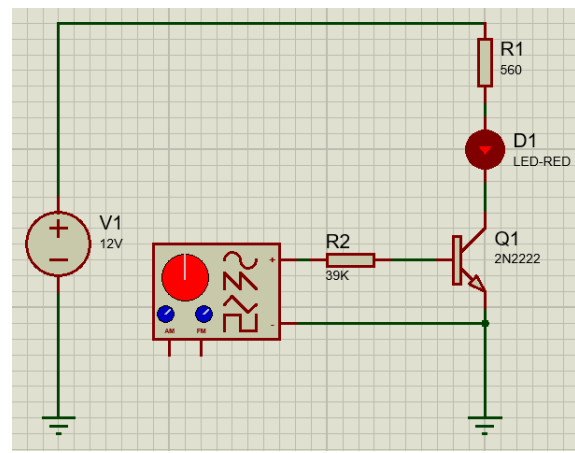
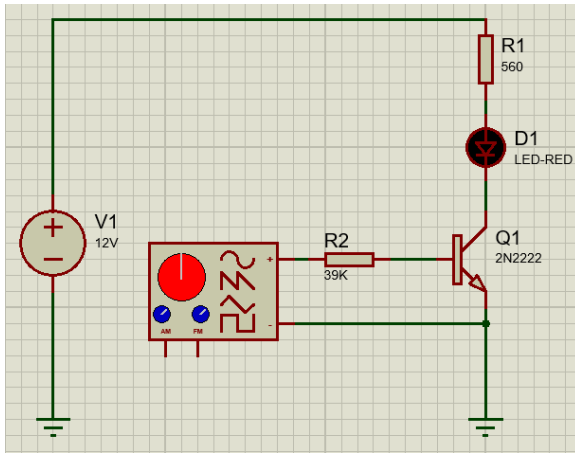


CANAL 1 : V_i

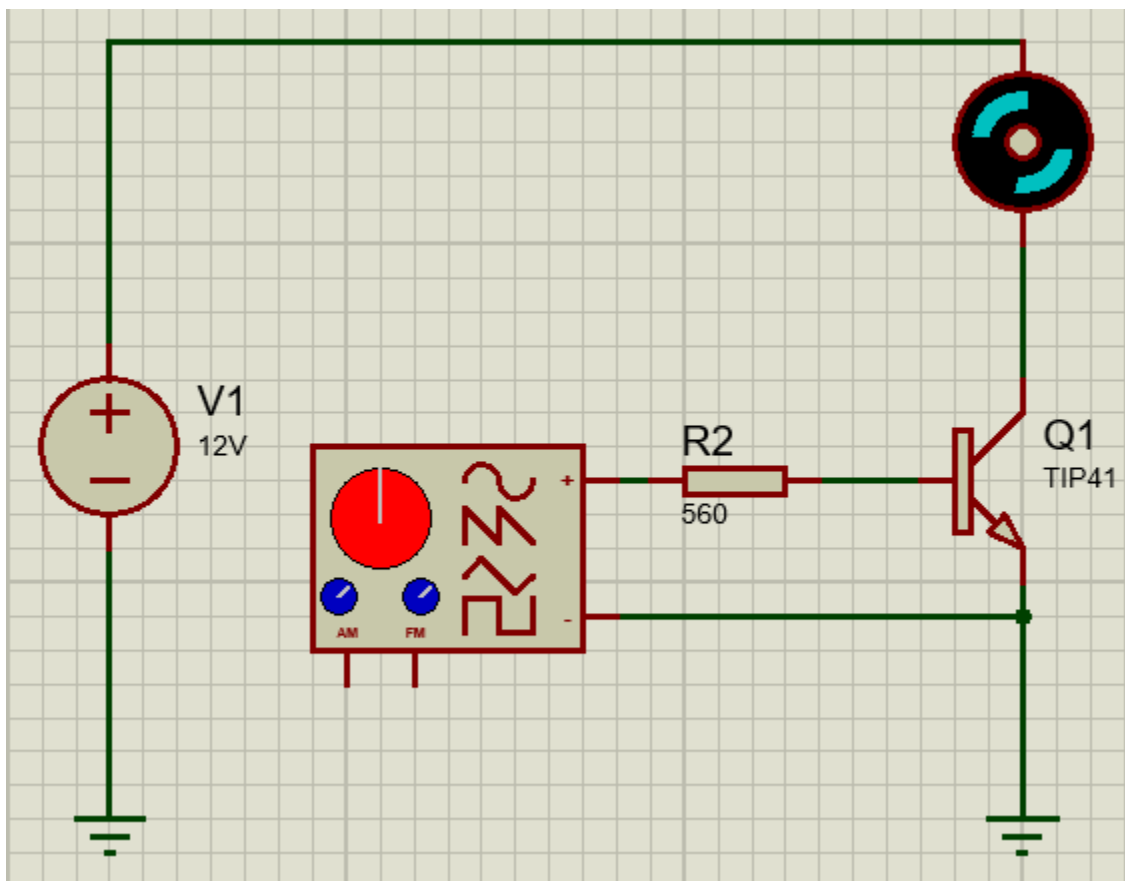
CANAL 2 : V_o

5mv/div Canal 2 (azul)

5mv/div Canal 1 (amarillo)



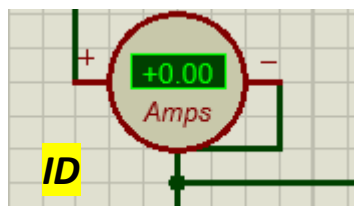
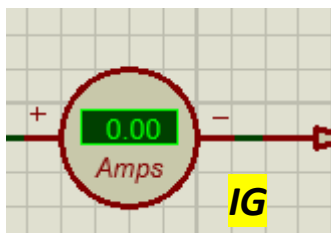
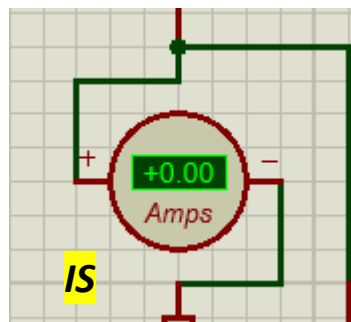
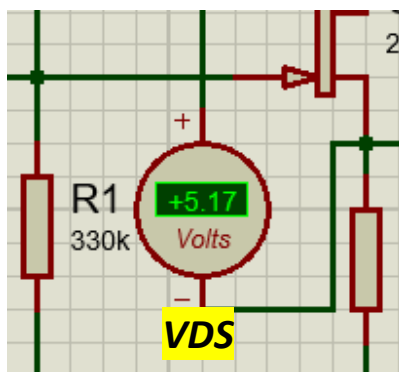
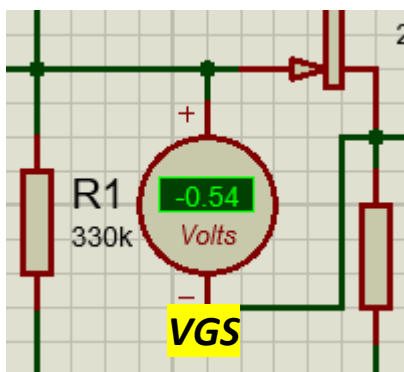
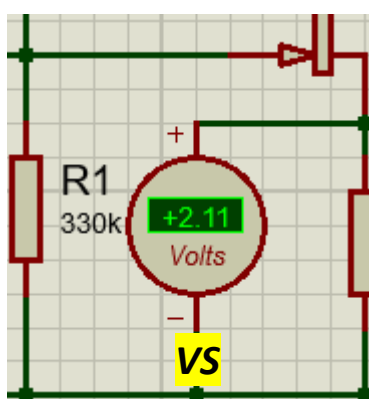
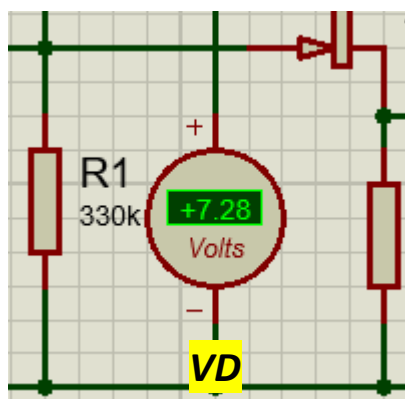
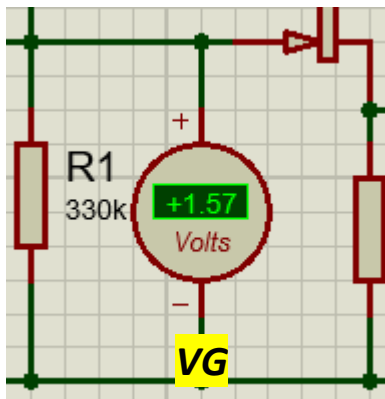
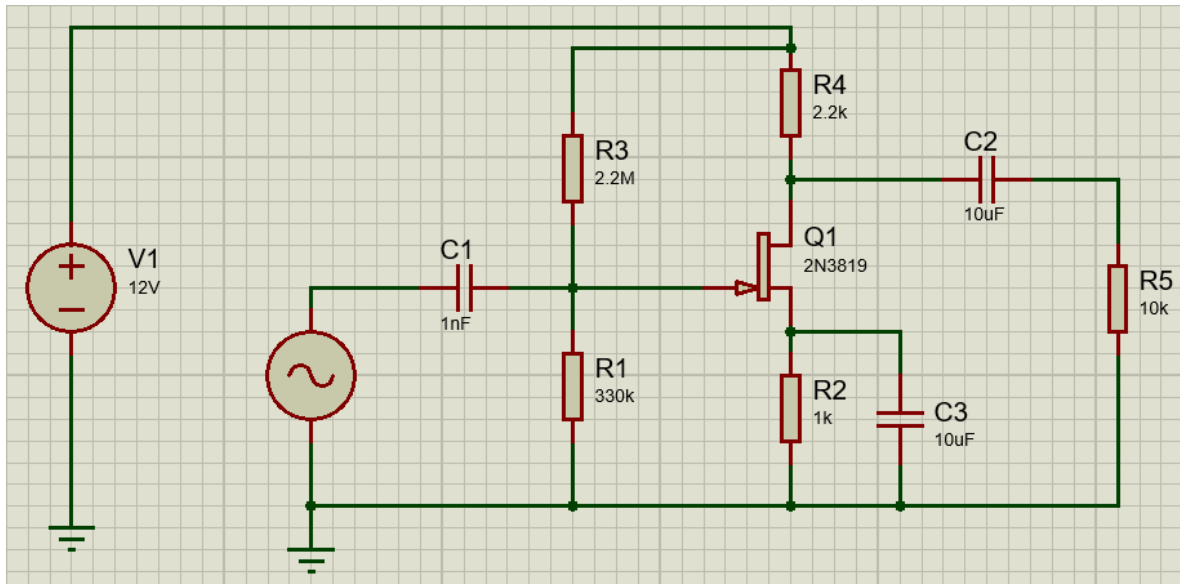
EN ESTE CTO. SE PUEDE OBSERVAR COMO EL LED PARPADEA DE ACUERDO CON LA SEÑAL CUADRADA.



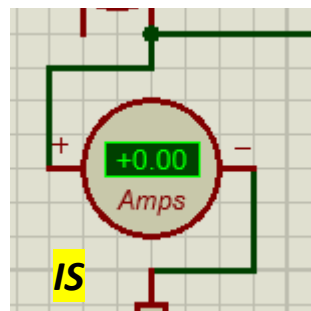
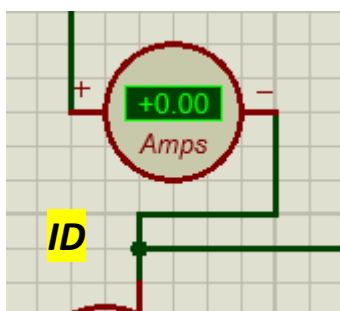
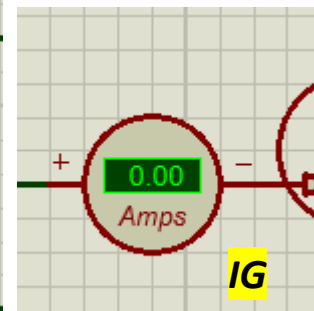
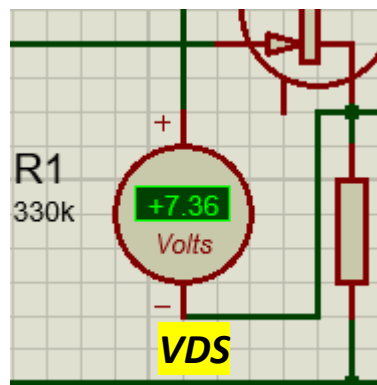
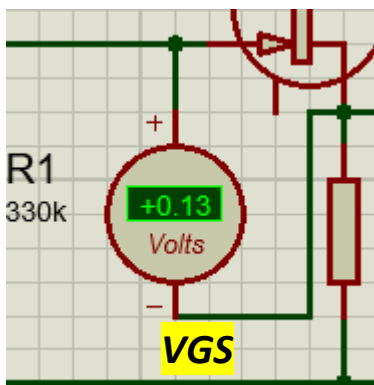
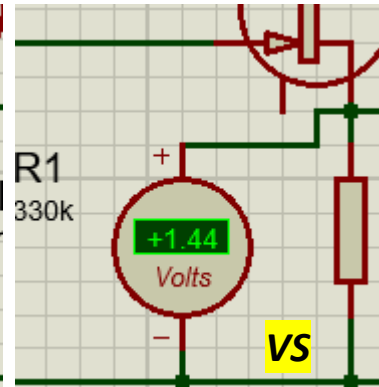
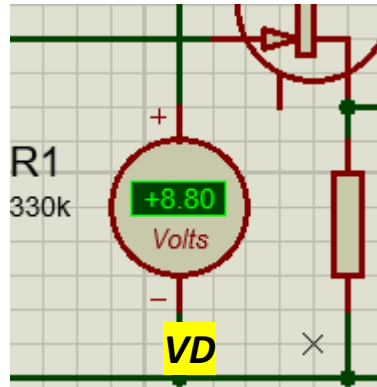
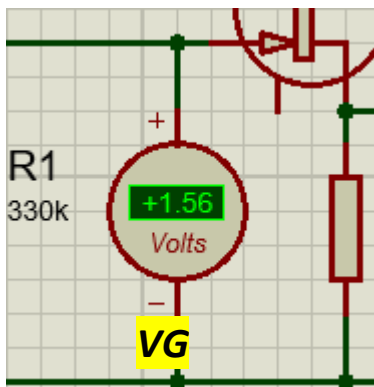
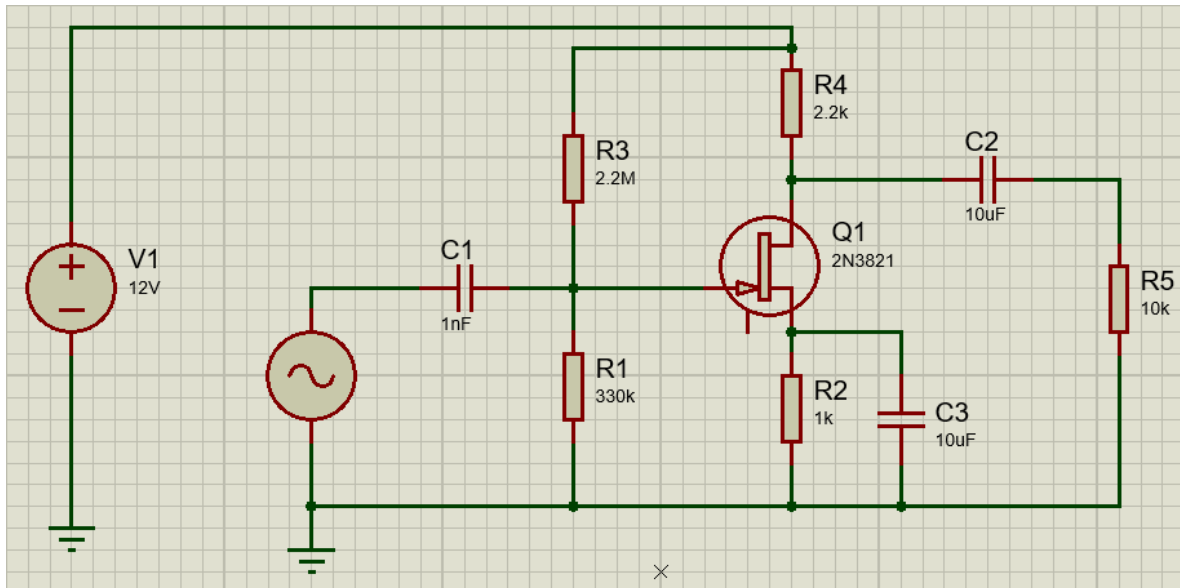
EN ESTE CTO. SE PUEDE OBSERVAR COMO EL MOTOR SE MUEVE DE ACUERDO CON LA SEÑAL CUADRADA. (SE ACTIVA, SE PAUSA Y ASÍ SUCESIVAMENTE)

3.5 CIRCUITO DE POLARIZACIÓN POR DIVISOR DE VOLTAJE DEL TRANSISTOR DE EFECTO DE CAMPO.

2N3819

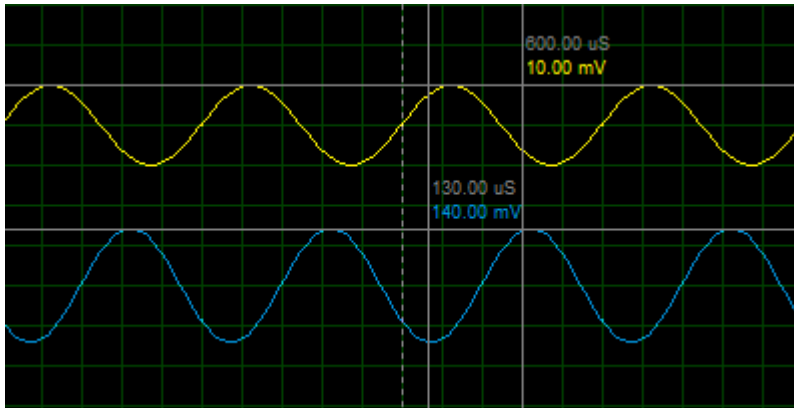


2N3821



3.5.2 MEDICIONES DE LA AMPLIFICACIÓN DE SEÑALES

2N3819



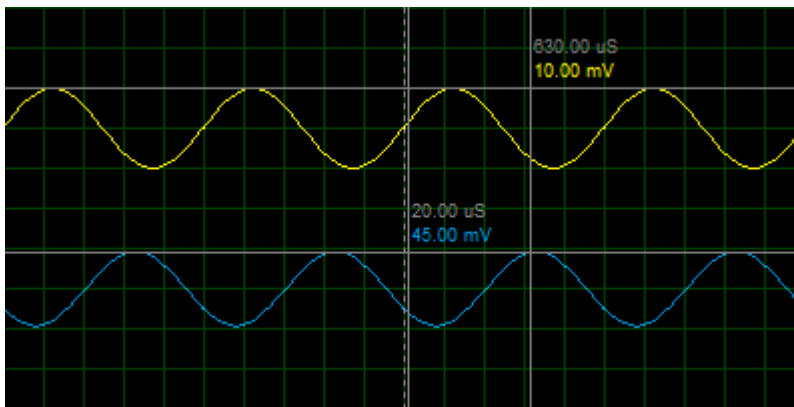
CANAL 1 : V_i

CANAL 2 : V_o

0.1mv/div Canal 2 (azul)

10mv/div Canal 1 (amarillo)

2N3821



CANAL 1 : V_i

CANAL 2 : V_o

50mv/div Canal 2 (azul)

10mv/div Canal 1 (amarillo)