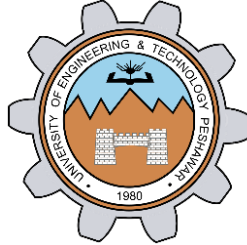


BC547 BASED AUDIO AMPLIFIER

Project Report



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CSE-206L Electronic Circuits Lab

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Class Section: **A**

“On my honor, as student of University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work.”

Submitted to:

Abdullah Hamid

DATED: 05/ August/ 2022

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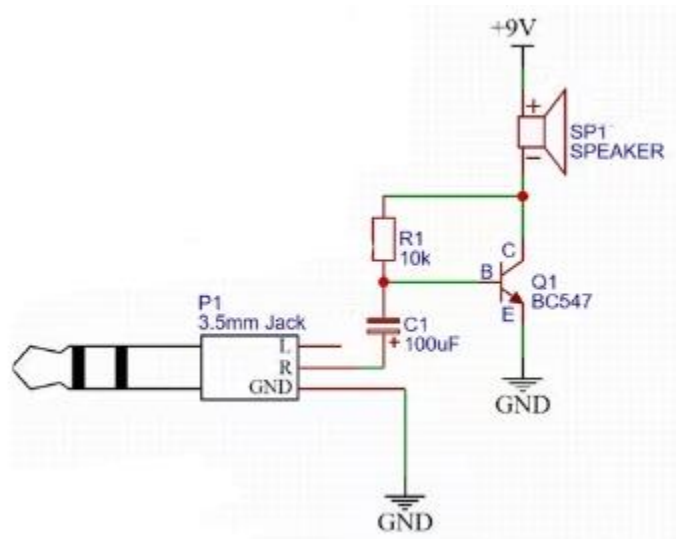
INTRODUCTION:

We can make an easy amplifier circuit with a BC547 transistor. This amplifies our audio for us on a lower level and doesn't requires any complex schematics and components.

HARWARE:

- BC547 Transistor
- 3.5mm Audio Jack
- 10K Resistor
- 10K Potentiometer
- Breadboard
- Speaker
- 9V Battery

SCHEMATICS:



CONSTRUCTION:

Connect all the components as shown in the schematic on a breadboard.

WORKING:

This circuit works on the essential principles of the NPN transistors. The low amplitude Audio signal goes into the bottom of the transistor.

Then the signal flows through the transistor's collector to emitter, as a result, the present will flow then the bottom gets a sign.

A capacitor is a connected serial with the bottom. This capacitor is employed to smooth the upper frequencies of the audio signal. (The signal which is coming from an audio signal)

Then this signal amplifies through the transistor's collector pin.

ADVANTAGES:

We can easily operate 4 ohm low speakers on this circuit.

LIMITATIONS:

If we run it for an extended time then the transistor will heat up quite a lot. As a result, the transistor could also be damaged.