

2225871

by Hugo Davies

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HNC Electrical and Electronic Engineering
SGEE4003 - Electronics 1
Formative Assessment
Hugo Davies
2225871
06/02/2023
??? Words

① LIMITED EVIDENCE OF RESEARCH.

② VERY SHORT CITATION LIST.

③ NO EXPLANATION OF DESIGN, TESTING, RESULTS OR ANALYSIS.

④ CIRCUIT OF AMPLIFIER WAS INCLUDED WITH EVIDENCE OF TESTING.

⑤ NO EVALUATION OR CONCLUSION.

⑥ WORD COUNT NOT EXCEEDED!

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Executive Summary

Planning and reflection

Research into amplifiers, oscillators and feedback

Design method, calculations and testing

Results

Analysis

Evaluation

Conclusion

Citation list

Appendices

Executive summary

Planning and Reflection

Research

Class A

The Class A emitter amplifier is designed to produce large swings in output voltage from a relatively low input signal voltage of a few millivolts and is used primarily as a small signal amplifier. (electronic tutorials, n.d)

However, sometimes an amplifier is needed to drive large resistive loads such as a Hifi Systems or motors in a robot, and power amplifiers are needed for applications where high switching currents are required. (electronic tutorials, n.d)

Because of these high load currents, the output transistors used in the output stages of power amplifiers like the 2N3055 must have higher voltages and power ratings than those typically used in small signal amplifiers like the BC107. (electronic tutorials, n.d)

Class B

Class B amplifiers were invented as a solution to the efficiency and heating problems associated with the earlier Class A amplifiers. The basic class B amplifier uses two complementary transistors, bipolar or FETs, for each half cycle, with the output stage configured in a push-pull circuit. so that each transistor amplifies only half of the output waveform. (electronic tutorials, n.d)

Design

Results

Analysis

Evaluation

Conclusion

Citation List

Electronics tutorials, (nd). Class A Amplifiers [online]

https://www.electronics-tutorials.ws/amplifier/amp_5.html

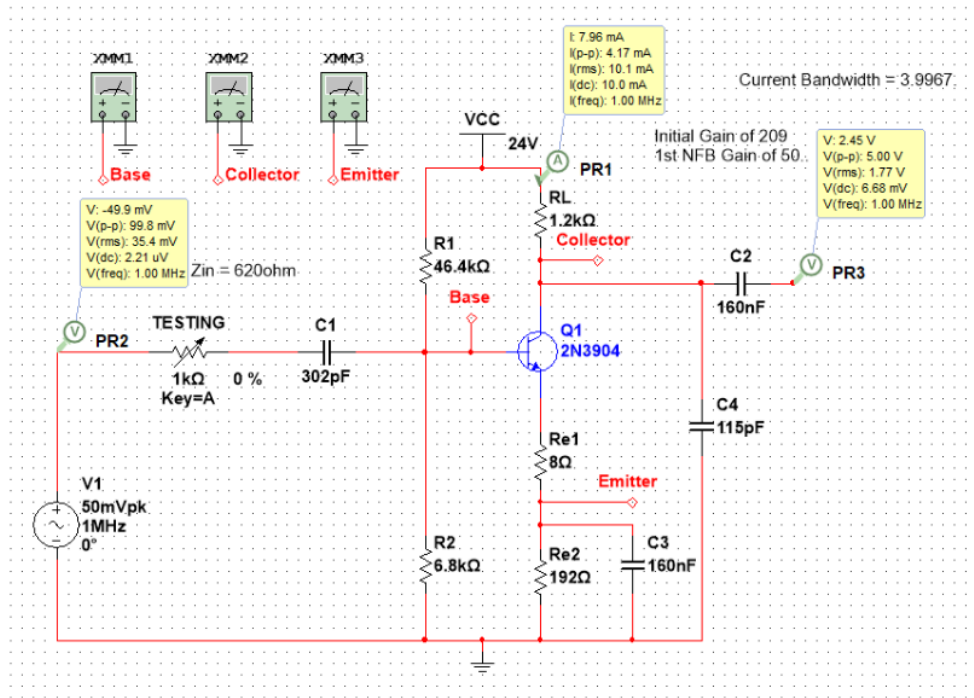
[accessed on 21st of January]

Electronics tutorials, (nd). Class B Amplifiers [online]

<https://www.electronics-tutorials.ws/amplifier/amplifier-classes.html#:~:text=Class%20B%20Amplifier%20Classes&text=The%20basic%20class%20B%20amplifier, half%20of%20the%20output%20waveform.>

[accessed on 21st of January]

Appendices



FINAL GRADE

GENERAL COMMENTS

Instructor

16/100

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GRADING FORM: CSG-RUBIC

HUGO DAVIES

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RESEARCH-INFORMED LITERATURE



There was some evidence of further reading and research and your interpretation and understanding of the additional research was OK. The sources referenced were insufficient at this level given the amount of potential research areas for this assignment and relied on a small selection of mainly inappropriate and non-authoritative sources. You also need to include more in-text citations using the Harvard reference system.

5/20

KNOWLEDGE AND UNDERSTANDING



The knowledge and understanding of the subject demonstrated by this assignment was generally unsatisfactory. There were many gaps in your knowledge of the basic principles and your understanding of the higher-level concepts was not demonstrated. Most of the report was missing.

3/20

ANALYSIS



The was no evidence of any analysis or evaluation within the report.

0/20

PRACTICAL APPLICATION AND DEP.



Your application of practical skills for this task was generally adequate. You used the resources appropriately when designing the circuit and you used appropriate options for testing and evaluating the circuit performance. You managed to design a basic circuit

5/20

SKILLS FOR PROFESSIONAL PRAC.



The little amount of work presentated was well written

3/20