

Circuit Theory and Electronics Fundamentals

BSc Aerospace Engineering, Técnico, University of Lisbon

Lab 3: AC/DC Converter Circuit

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1	Introduction
2	Theoretical Analysis

Solving the OP problem we get $V_{CE} = 2.1578$

Regarding the gains plots between the first and 2 stage we can see that they do not differ a lot, this is believable since $AV_2 = -0.0348$ db as we can see in the table, so it does not vary much the result.

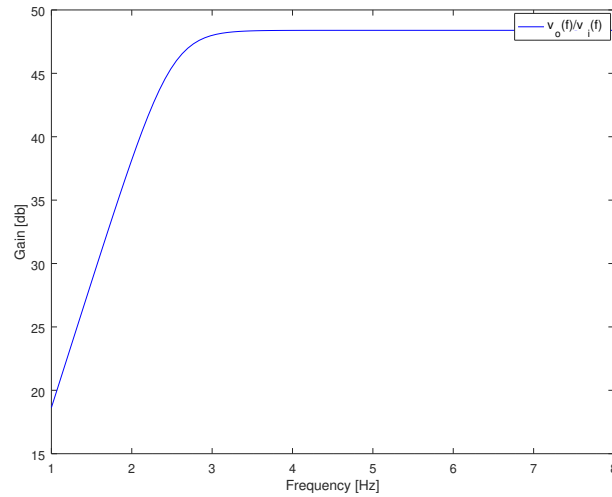


Figure 1: Gain in the first phase

Nevertheless the inputs and outputs for this stages are present in the following table:

AV1	262.79
ZI1	484.43
ZO1	886.28
AV2	0.996
ZI2	8598.9
ZO2	0.302

As such the final gain plot can be given by the following Figure.

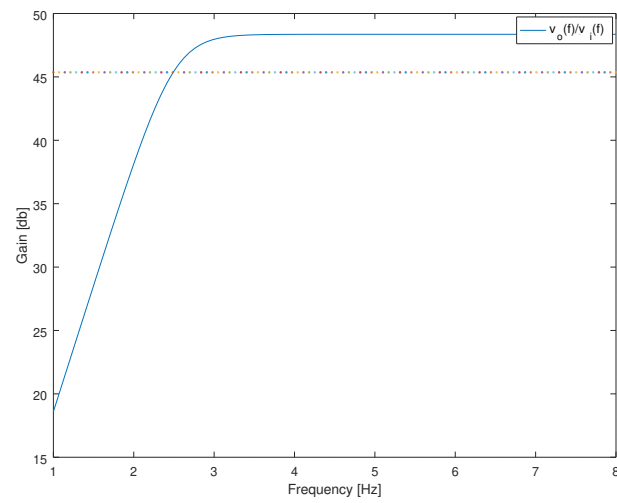


Figure 2: Output Gain

3 Simulation Analysis

4 Conclusion