

Laboratory work 2 EXAMINING THE FILTERS

Report instructions

Part A

Answers to questions in the sections number three and four.
Answers to the questions marked with @.

Attach one print of the curves of Butterworth filter with (following) explanations to the report. Other prints of the curves need not to be returned.

Explanations for the print of the Butterworth filter:

- Calculate and mark to the print the selectivity of the filter, with markings needed.
- In reality, there are no jumps (points of discontinuity) in the phase response (phase distortion) curve. Calculate/measure and mark to the picture the magnitude of the phase difference between frequencies 2000 and 4000 Hz.

NOTE!

Only those pictures that have been asked to attach in these instructions will be attached to the report!

WRITING THE REPORT

1. The report can be made either written or with computer. The maximum for written text is 4 pages and 2 pages with computer. These limits are suggestive and can be diverged with consideration.
2. At the beginning of the report there should be a pair number, names, student numbers, the name of the supervising assistant, date and time and also the deadline for the report.
3. The appearance (readability) is taken into account in grading the report. Clearly made document is easy to read and check, so there may be extra points for appearance.
4. Before you write the report, talk through the work and the results with your lab partner. Use approximately 1 hour to do this. After that, it will be easy to write the report.
5. The dead line for the report is the Friday week after you've done the laboratory work. For special reasons you might get extra time to do the report. A special reason can be eg. illness. **Do the report straightly after the laboratory work**, when things are still fresh in the memory. The possible extra time for the report you can ask from the head assistant of the course.
6. The written reports are returned to the lockers under the notice board of the course. There is one locker for each laboratory work. Make sure that all the parts of the report stay together. Staple the papers together and use even an envelope if necessary.