**中山大学**

**电路与电子学实验课程实验报告**



实验主题\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

实验时间\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

姓名 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

学院 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

实验日期 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **实验目的**  1.分析R、L、C取不同值时对电路的影响。  2.探究电源频率对L、C元件阻抗特性的影响。  3.探究元件的阻抗角受电源频率的影响。 |
| **实验原理**  1.阻抗元件在电路中的抗流作用与信号的频率有关。  2.在实验过程中，可以根据实际需要，在R、L、C、f中，定三调一。 |
| **注意事项** |
| **实验仪器、设备**  示波器1台，实验箱1台（含可调电阻，电感，电容），导线若干。 |
| **实验步骤** |
| **仿真图纸** |
| **仿真数据表格（无内阻理想电源）**   |  |  |  | | --- | --- | --- | | 元件（物理量）名称 | 电流（mA） | 电压（V） | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |

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| **实验数据表格**   |  |  |  |  | | --- | --- | --- | --- | | 实验条件 | 元件名称 | 电流(mA) | 电压（V） | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |
| **实验结论** |
| **实验数据误差分析** |
| **实验总结和反思** |