

Laboratory exercise 2.4

CIRCUIT ELEMENTS

DIFFERENTIAL NOTE

Procedure of measurement

- On the measuring equipment observe waveforms of the current passing the resistor R (*shorting jumper is in the S1 position*), the inductor L (S2) and capacitor C (S3). The equipment is supplied by the voltage source of frequency $f = 10$ kHz. Suggested amplitude is $U_m = 5$ V. The waveform of the voltage is
 - sinusoidal
 - rectangular
 - triangular.
- On the measuring equipment observe waveforms of the voltage across resistor R (*shorting jumper is in the S4 position*), the inductor L (S5) and capacitor C (S6). The equipment is supplied by the current source of frequency $f = 2$ kHz (current source is series connection of a voltage source and a resistor of big resistance). Suggested amplitude is $U_m = 5$ V. The waveform of the voltage is
 - sinusoidal
 - rectangular
 - triangular.

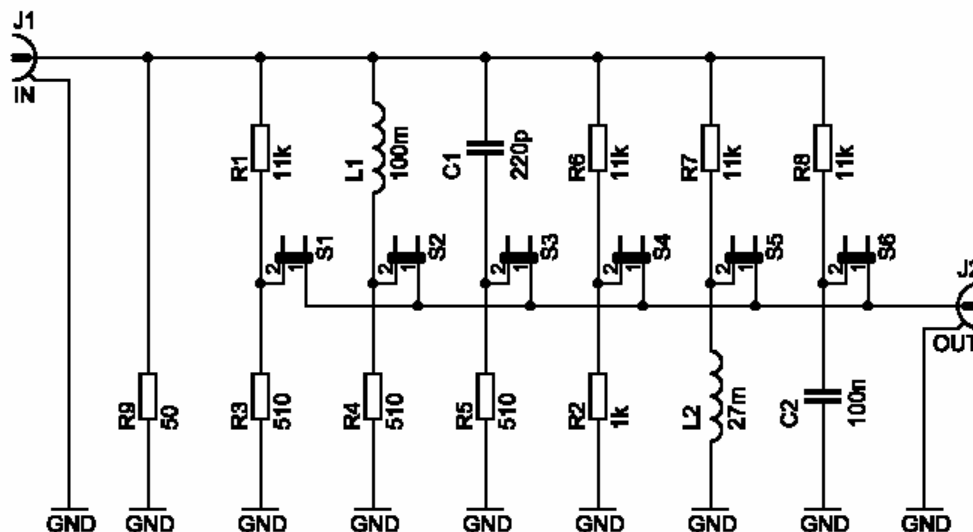


Figure 1: Circuit diagram

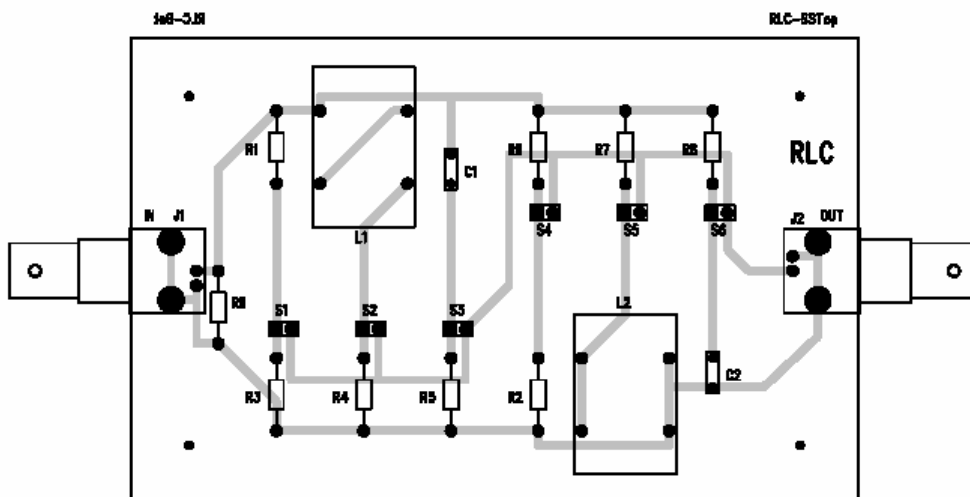


Figure 2: Measuring equipment