

EXPERIMENT: 7.5

EXAMINATION OF SOURCE GROUND CONNECTION

EXPERIMENTAL PROCEDURE:

Plug the Y-0016/012 module. Make the circuit connections as in Figure 7.13 and apply energy to circuit.

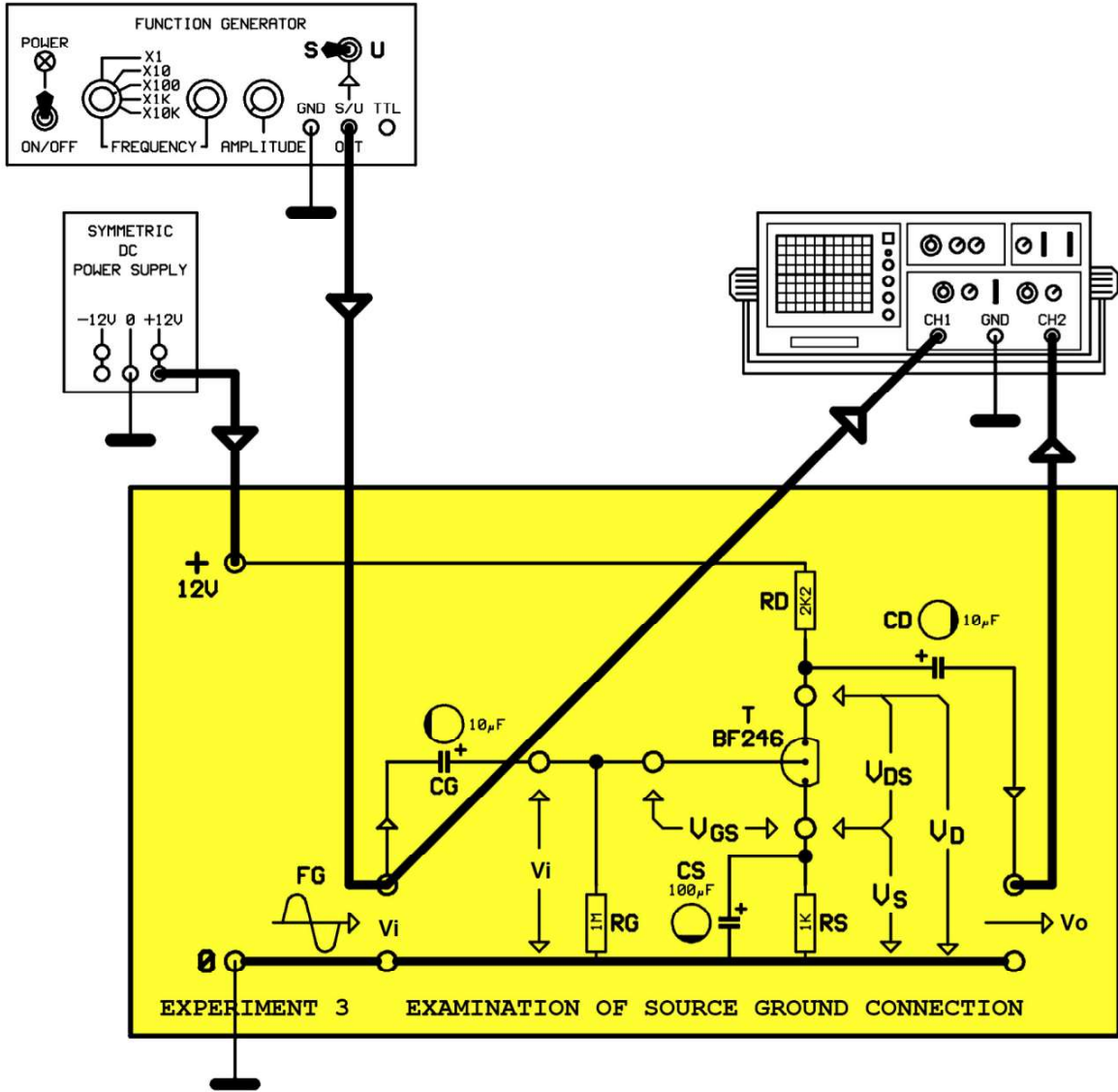


Figure 7.13

1- Disconnect the function generator from the circuit. Measure the VG, VGS, VS, VDS, VD voltages by the help of a digital voltmeter.

<i>Vi</i>	: Volt
<i>VGS</i>	: Volt
<i>VS</i>	: Volt
<i>VDS</i>	: Volt
<i>VD</i>	: Volt

2- Adjust the output of function generator to sine, frequency to 1 KHz and peak to peak amplitude to **Vpp**=100mV, and apply to FG input. What is the phase difference of input and output signal? Measure the amplitude of output signal.

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Output signal amplitude is Vpp=.....Volt.

3- Calculate the voltage gain of circuit.

Voltage gain:

$$A = \frac{V_{out}}{V_{in}} = \dots\dots\dots$$

4- In which areas the source ground connection is used?