

Introduction To Analog Electronics – Lesson 5: RL/RC Passive Filters

#### **HOMEWORK**

The following homework questions are meant to go with the online lesson found here: http://www.pyroelectro.com/edu/analog/passive\_filters/

### **HOMEWORK QUESTION 1**

What is the cut-off frequency  $f_c$  of a filter and why is it important to know?

# **HOMEWORK QUESTION 2**

Can a resistor + capacitor (RC) be used to build both a low-pass AND a high-pass filter?

### **HOMEWORK QUESTION 3**

Draw an RL high-pass filter circuit.

# **HOMEWORK QUESTION 4**

If I have a RC low pass filter circuit with R = 10  $\Omega$ , C = 10 uF, what would the cut-off frequency be?

# **ADDITIONAL INFORMATION**

To get feedback on your homework or to ask additional questions related to this lesson, please post your homework answers or your questions in the online forums at:

http://www.pyroelectro.com/forums/