

Introduction To Analog Electronics - Lesson 6: RLC Filters

HOMEWORK

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

HOMEWORK QUESTION 1

How is an RLC 'band-pass' filter different from a low pass or high pass filter?

HOMEWORK QUESTION 2

Using the ω_0 equation find what inductor value would we need to make an RLC filter with a center frequency of 10,000 Hz, if we already have a resistor = 8 Ω and capacitor = 100 nF.

HOMEWORK QUESTION 3

What is the difference between the lower cut-off frequency point, the center frequency and the upper cut-off frequency point?

HOMEWORK QUESTION 4

How do you convert from the radians per second unit of frequency, to the Hertz unit of frequency?

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/