

# EN-3212 Electronics

## Frequency Response Functions

What you really need to know right now.

1. You should know how to calculate dB Voltage gain. ( $V_1$  is the source voltage and  $V_2$  is the filter output voltage)

$$\text{dB Voltage Gain} = 20 \log_{10} \left( \frac{V_2}{V_1} \right)$$

2. You should know how to calculate a cutoff frequency and you should know what it is.

$$f_{\text{cutoff}} = \frac{1}{2\pi RC}$$

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3. You should know the voltage amplitude equations for the RC High Pass and Low Pass filters and you should be able to identify the corresponding log/dB plots.

