

48 kHz A-weighting filter

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Definition

The A-weighting filter used for sound level measurements is described in the IEC 61672:2003 standard. In this standard only the analog specifications are given. Using a digital filter these specifications have to be transformed for each sampling frequency to be used. The following IIR filter coefficients can be used for 48 kHz sampling.

a1	-1.34730722798
a2	0.34905752979
b0	0.96525096525
b1	-1.34730163086
b2	0.38205066561
a1	-1.89387049481
a2	0.89515976917
b0	0.94696969696
b1	-1.89393939393
b2	0.94696969696
a1	-1.34730722798
a2	0.34905752979
b0	0.64666542810
b1	-0.38362237137
b2	-0.26304305672

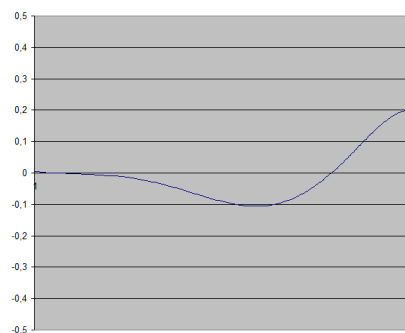


Figure 1: Error curve 0 - 20 kHz