

Gain:

$Z_{15} := 15000$... internal resistor between Pin 1 and Pin 5

$Z_{18} := 1350$... internal resistor between Pin 1 and Pin 8

$R_G := 150$... external gain resistor in series with 10uF cap. (150+10k Poti)

$$Z_G := \frac{1350 \cdot R_G}{1350 + R_G} = 135 \quad \text{Ohm}$$

$$G := 2 \cdot \frac{Z_{15}}{150 + Z_G} = 105.263$$

$$G_{dB} := 20 \cdot \log(G) = 40.446 \quad \text{dB}$$

Active Filters:

Can be found in Excel Calculations!

Lower Cut Off Frequency is around 300Hz.

Upper Cut Off Frequency is around 3kHz.