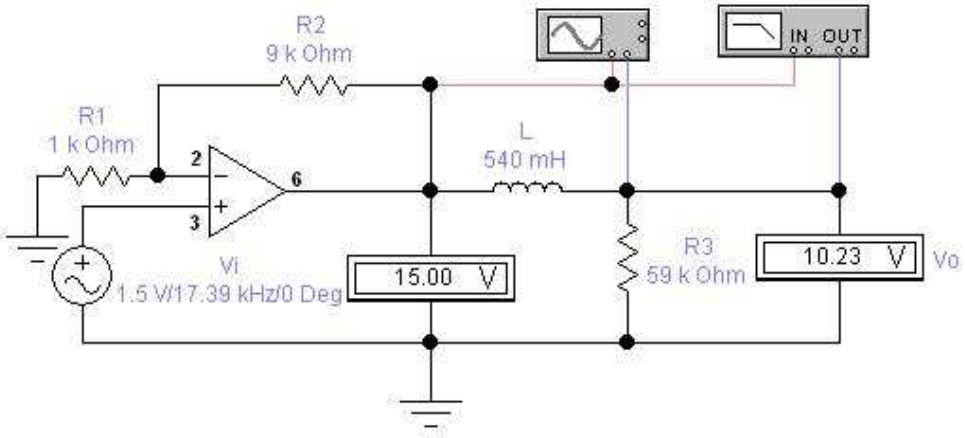
Progetto di Luigi di Massa - Filtro attivo Passa-Basso L_R – Data: 7/1/08



K = 10 –guadagno statico

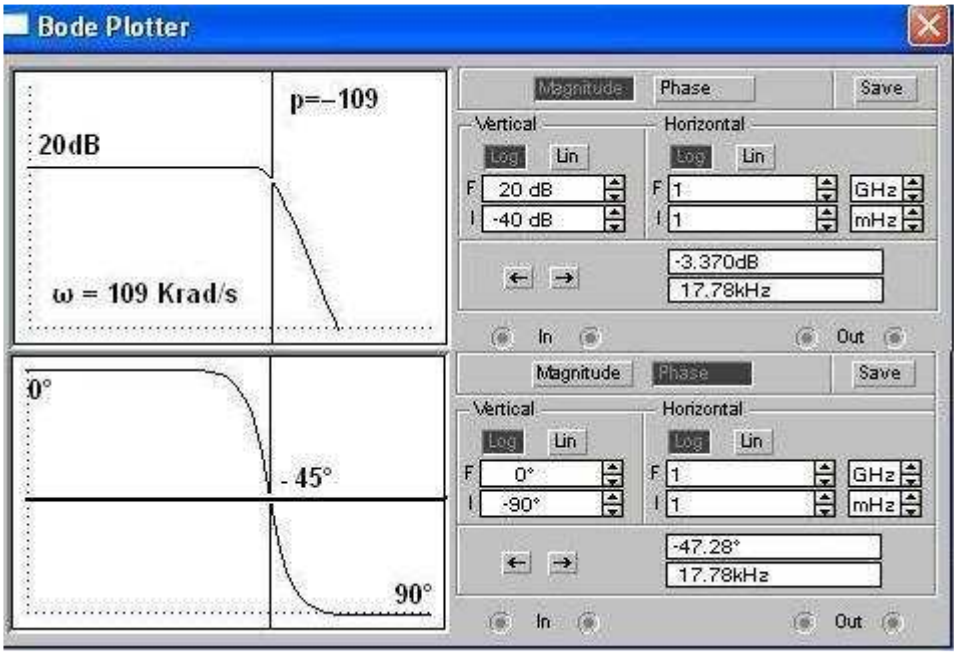
$$\tau = \frac{L}{R} = 9{,}15\ \mu s$$

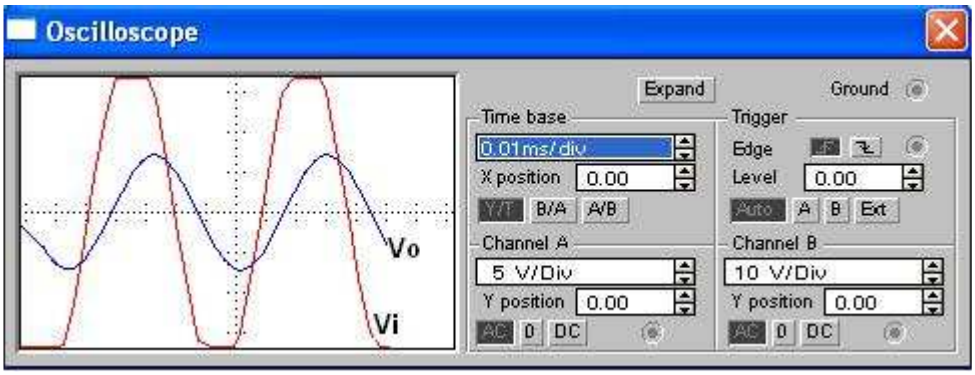
f_t=17.39 KHz G_{db}=20dB

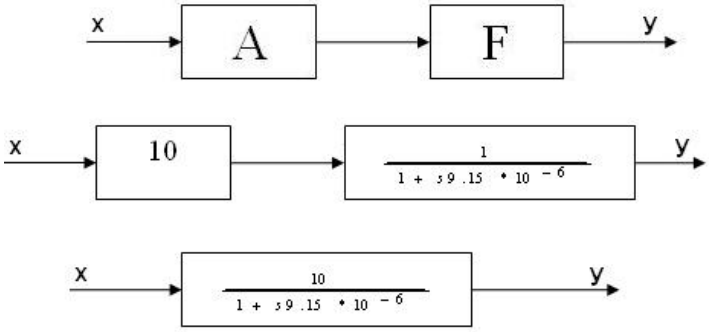
$$A = \frac{R_2}{R_1} + 1 = \frac{9}{1} + 1 = 10$$

$$A_t = \frac{Vo}{Vi} = \frac{10.23}{1.5} = 6.82$$

$$W = A * F = \frac{10}{1 + s9.15 * 10^{-6}}$$







Programma in MATLAB

```
» F=TF(1,[0.00000915 1])

Transfer function:
       1
---------------
9.15e-006 s + 1

» A=10

A =

    10

» W=A*F

Transfer function:
      10
---------------
9.15e-006 s + 1

» BODE(W)
»
```