

Primeru aplicame L V K

$$V_R(t) = R \dot{i}(t) + \frac{1}{C} \int i(t) dt \dots (1)$$

$\xrightarrow{\text{Resistoria}}$ $\xrightarrow{\text{capacitor}}$
 Func Minu la tapla

$$V_C(t) = \frac{1}{C} \int i(t) dt \dots (2)$$

Aplicando transformada

$$V_R(s) = R I(s) + \frac{1}{sC} I(s) \dots (3)$$

$$V_O(s) = \frac{1}{sC} I(s) \dots (4)$$

$\frac{V_O(s)}{V_i(s)} = \frac{1}{sCR+1}$
F.T de la equacion
 $s = j\omega = j2\pi f$

Filtro
Pasa bajos
→ a) $K = \lim_{s \rightarrow 0} G(s) \approx \frac{1}{(0)CR+1} = 1$

b) $K = \lim_{s \rightarrow \infty} G(s) \approx 0$