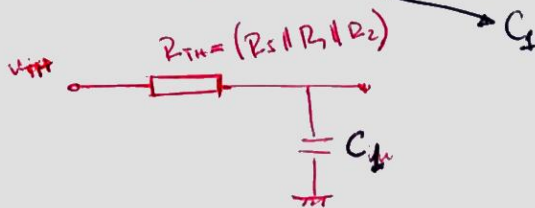


→ Agora precisamos avaliar os polos:

Polo entrada

$$f_{in} = \frac{1}{2\pi (R_s \parallel R_1 \parallel R_2) \cdot 10 \times 10^{-12}} \approx 320 \text{ kHz}$$



$$f_{out} = \frac{1}{2\pi (10^4 \cdot 100 \times 10^{-12})} \approx 160 \text{ kHz}$$



$$\frac{V_{gate}}{V_{in}} \approx \frac{1}{1 + j2\pi f \underbrace{50 \times 10^{-12}}_{(R_s \parallel R_1 \parallel R_2)}}$$

$$\frac{V_{out}}{V_{gate}} = \frac{-g_m \cdot 10K}{1 + j2\pi f \underbrace{10K \cdot 100pF}_{R_D \cdot C_2}}$$

$$\frac{V_{out}}{V_{in}} \approx \frac{-g_m \cdot 10K}{(1 + j2\pi f 50 \times 10 \times 10^{-12})(1 + j2\pi f \cdot 10 \times 10^3 \cdot 100 \times 10^{-12})}$$