

I. Cas a

$$\frac{V_c}{V_e} = \frac{jC\omega R_c R}{R_c + R + jR_c R\omega C} \Rightarrow \left| \frac{V_c}{V_e} \right| = \frac{C\omega R_c R}{\sqrt{(R_c + R)^2 + R_c^2 R^2 \omega^2 C^2}}$$

II. Cas b

$$\frac{V_c}{V_e} = \frac{jR_c C\omega}{1 + (R_c + R)jC\omega} \Rightarrow \left| \frac{V_c}{V_e} \right| = \frac{R_c C\omega}{\sqrt{1 + (R_c + R)^2 C^2 \omega^2}}$$