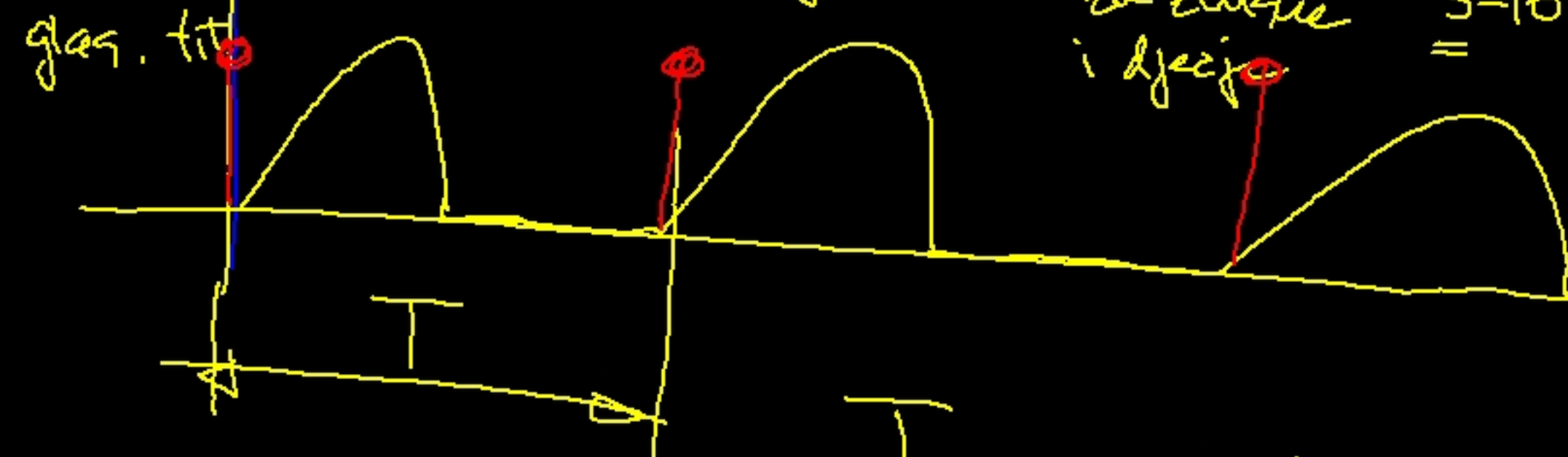


Vrijedi struja zraka u glasnicama

samo za zvučne glasove kod kojih

za muške $T = 10-20 \text{ ms}$

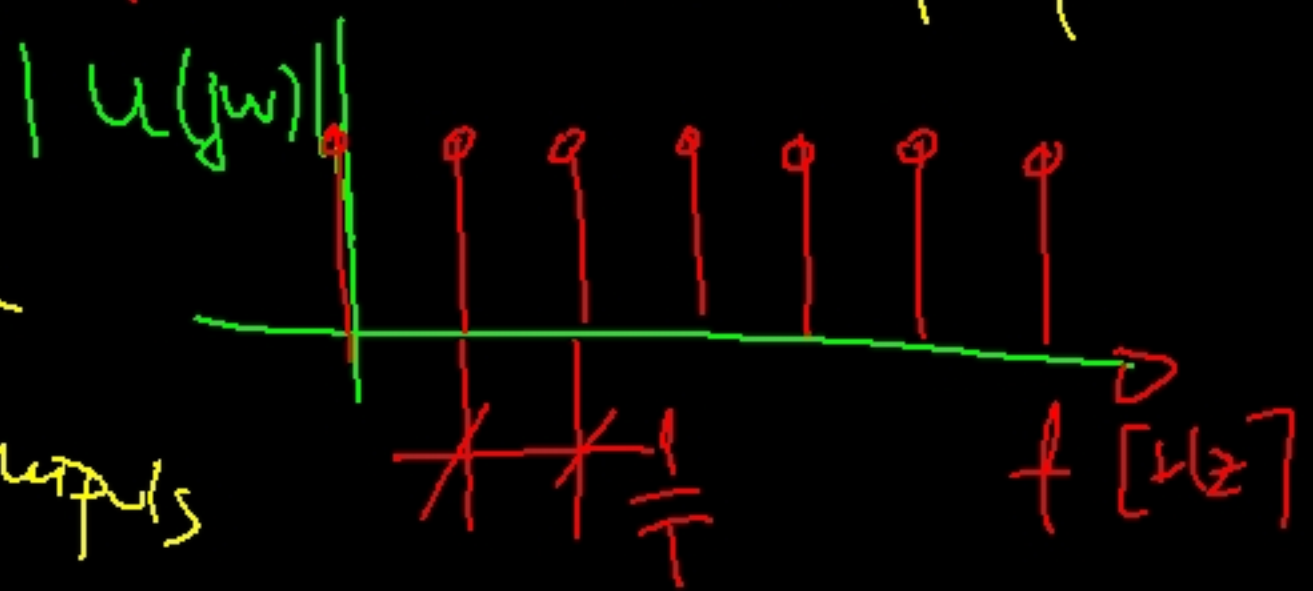
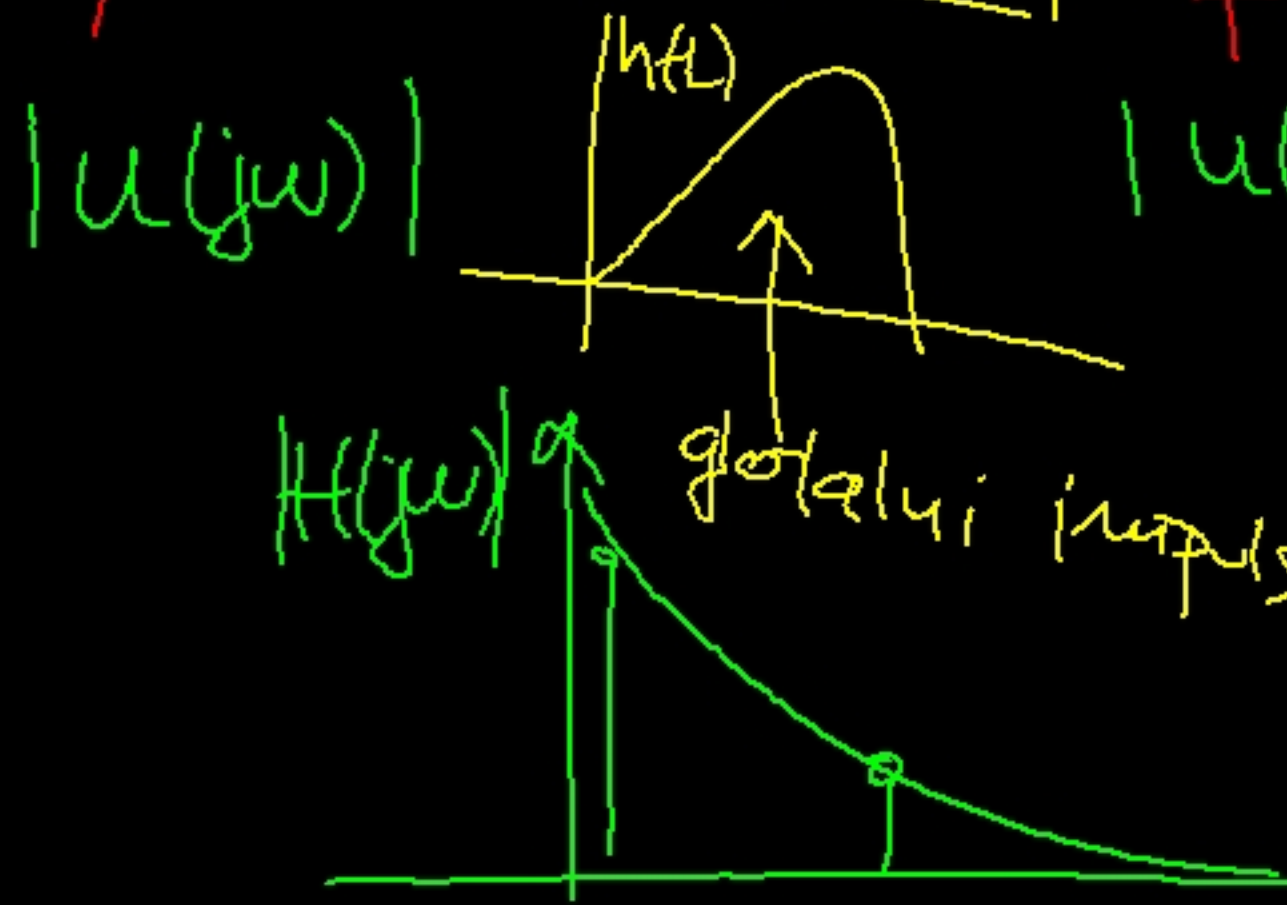
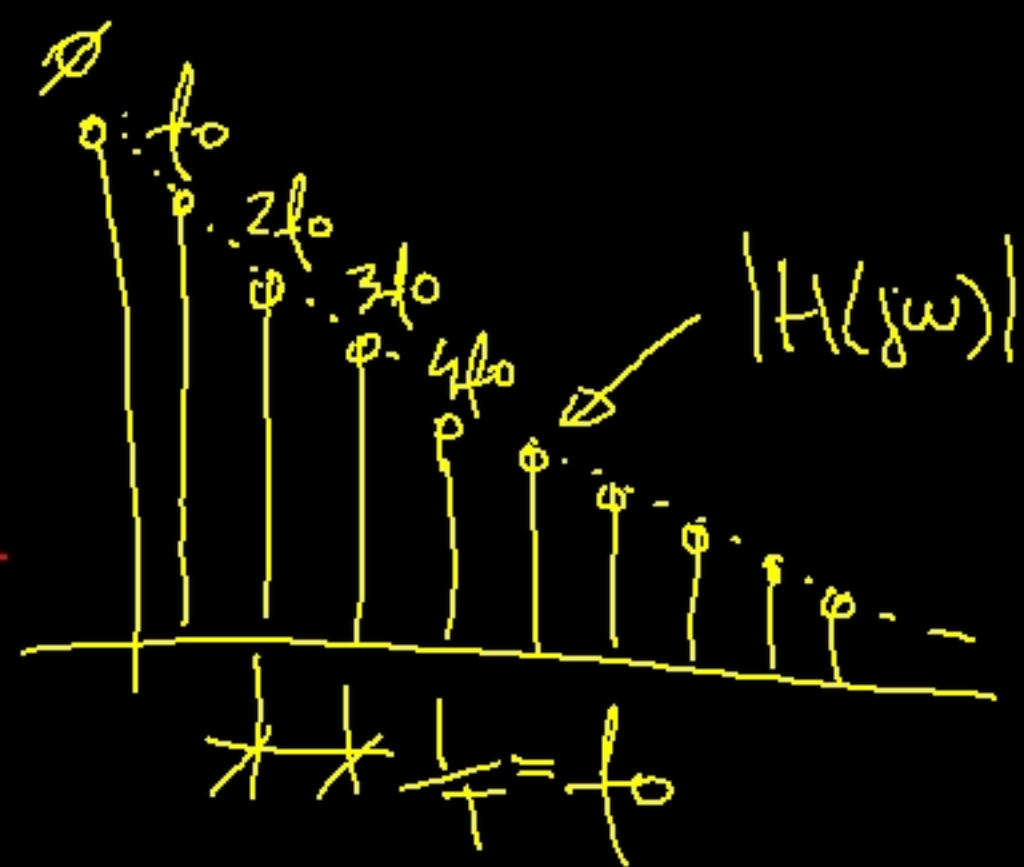
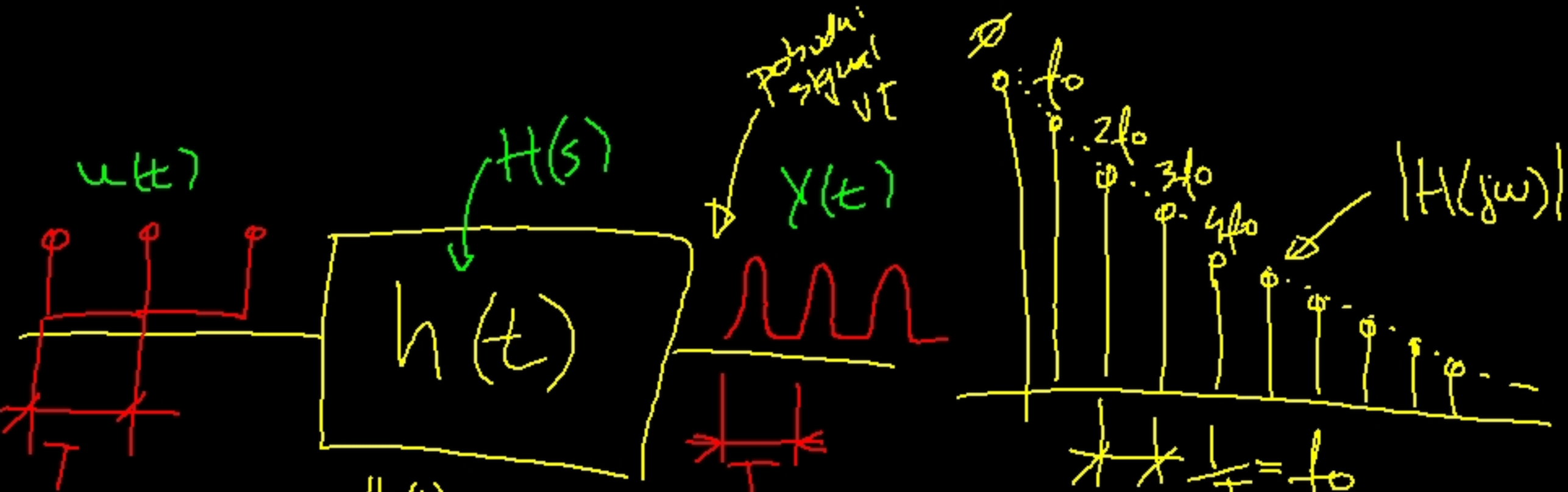
za ženske i dječje $= 3-10 \text{ ms}$



T... period titranja glasnica

$\frac{1}{T} = f_0$... frekvencija tit. glas.

"fundamentalna frekv"



Polovni sig. VT se sastoji od
sume harmoničke osnovne
frekv. tit. glas.

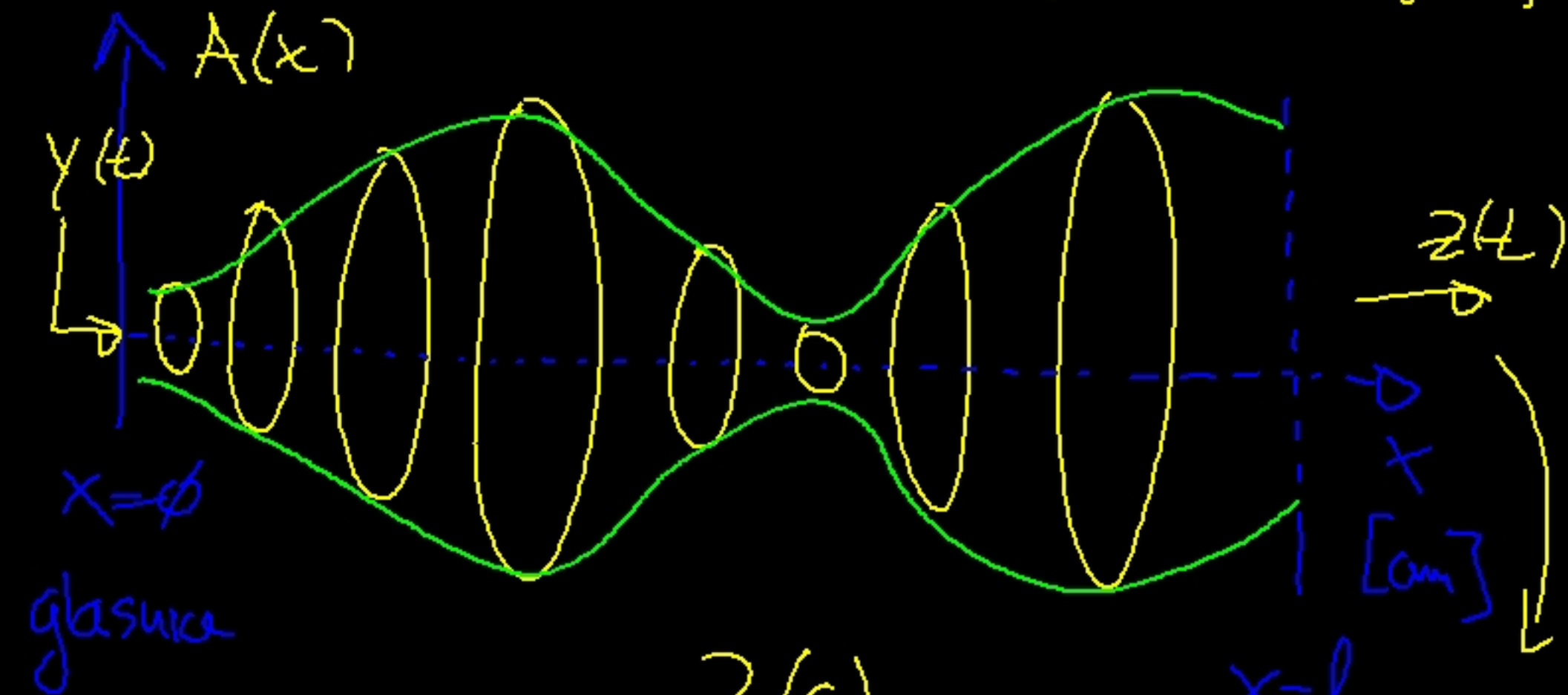
$$x(t) = \sum_{k=\varphi}^{\infty} A_k \cos(\underbrace{2\pi f_0 \cdot k t}_{\omega_0} + \vartheta_k)$$

$\omega_0 = 2\pi f_0$
osnovna kružna fr.

$$\vartheta_k = \arg(H(j\omega_k)) \quad \omega_k = k \cdot \omega_0$$

$$A_k = |H(j\omega_k)| \quad \text{---}$$

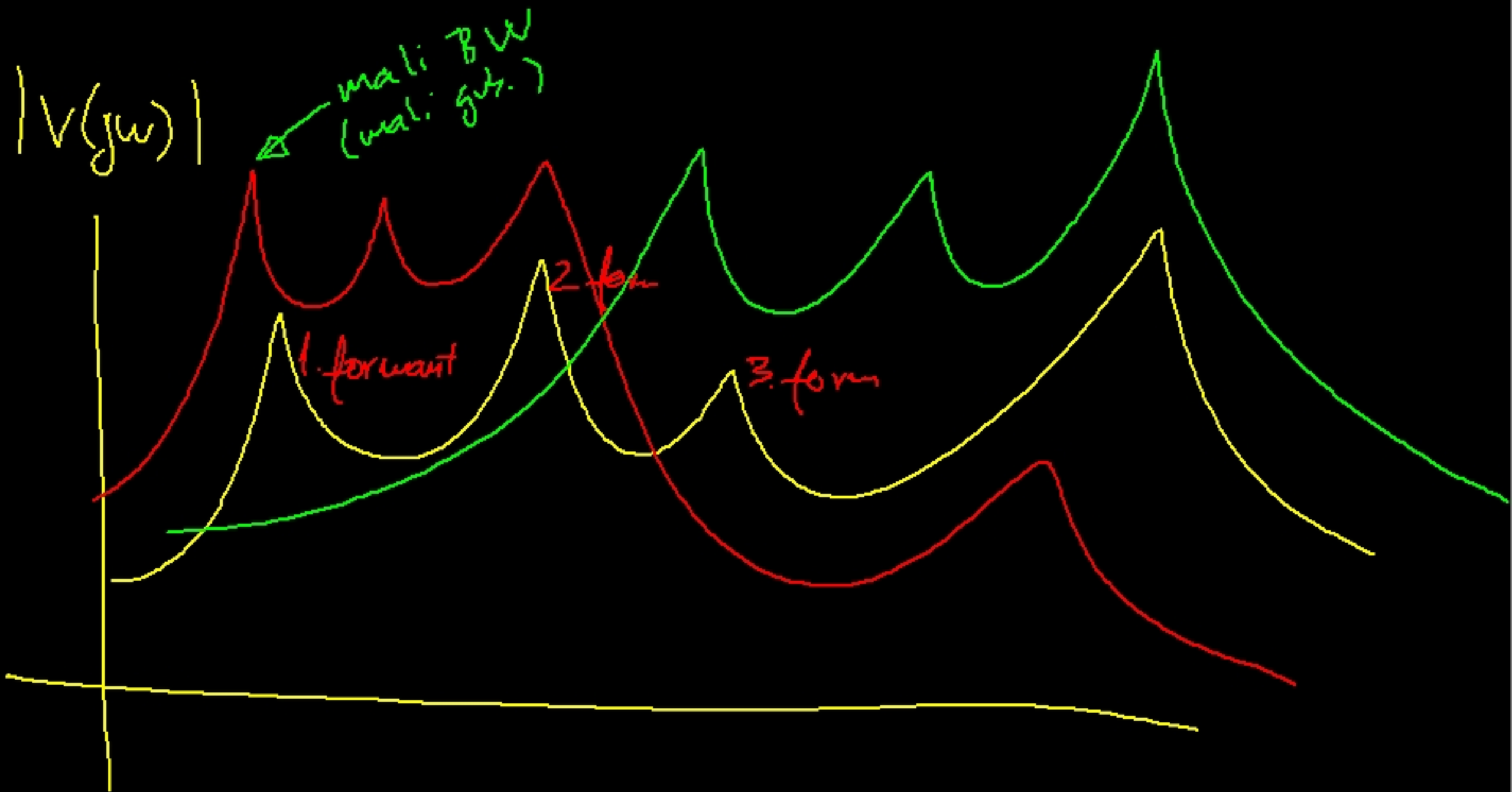
Model. VT pomoću jedne cijevi kružnog
 preseka čiji se pop. presjek mijenja duž osi

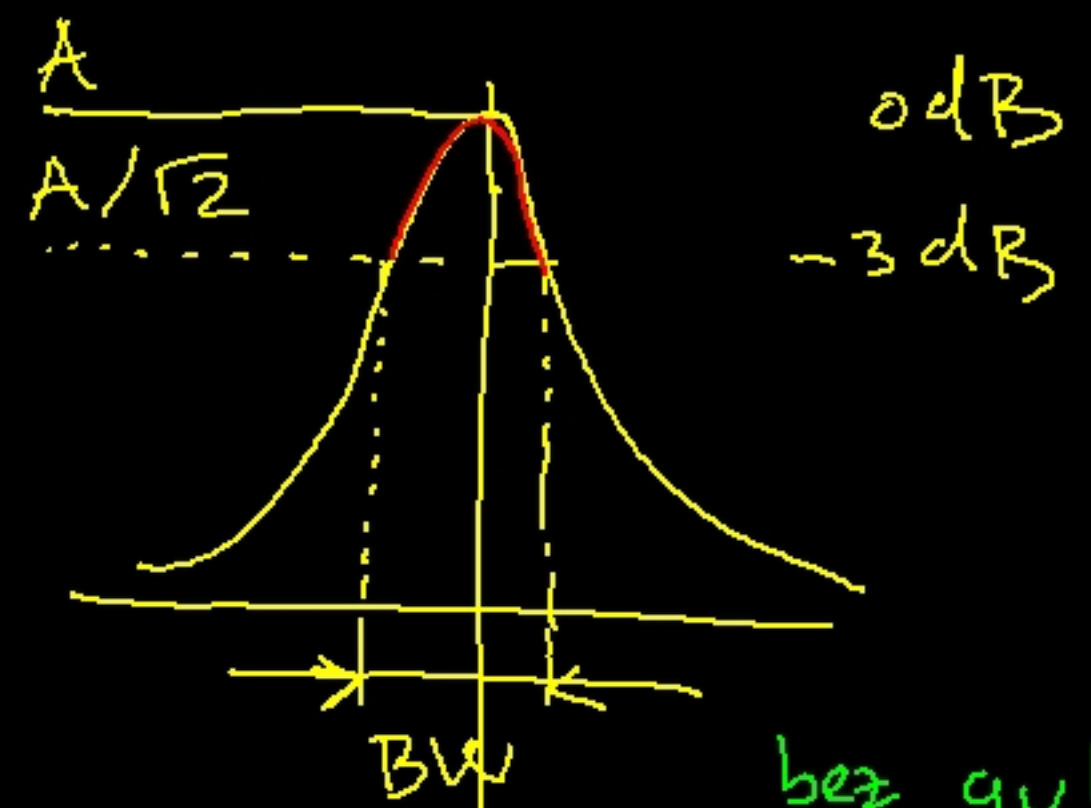
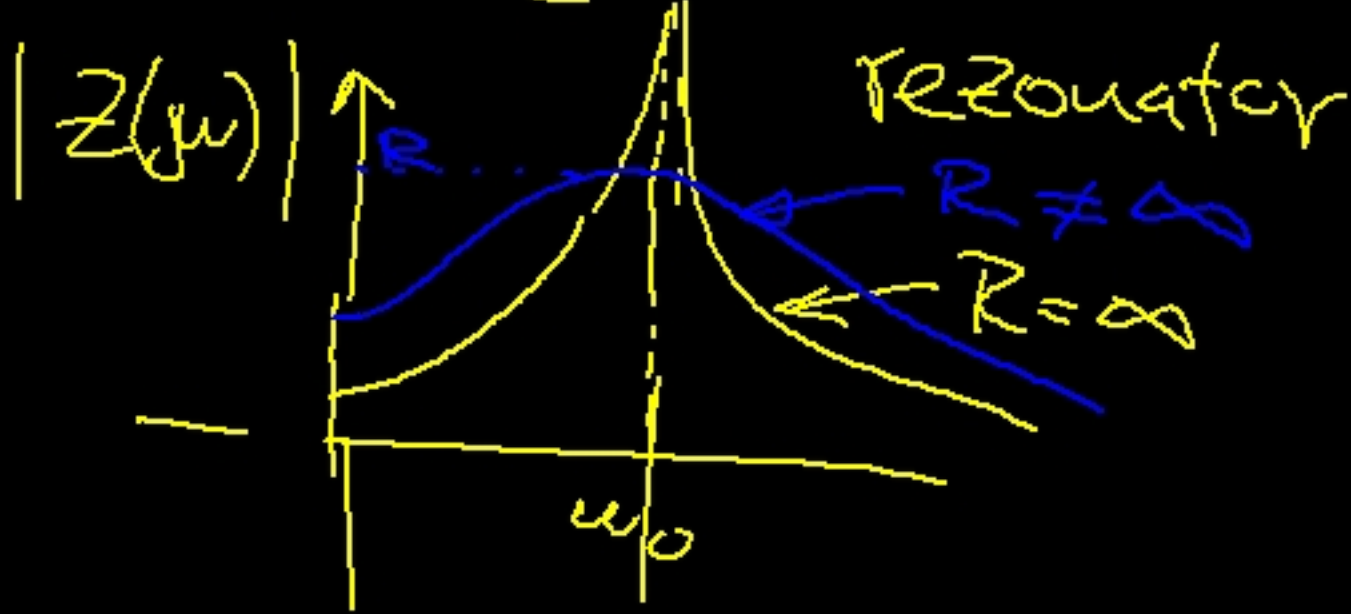
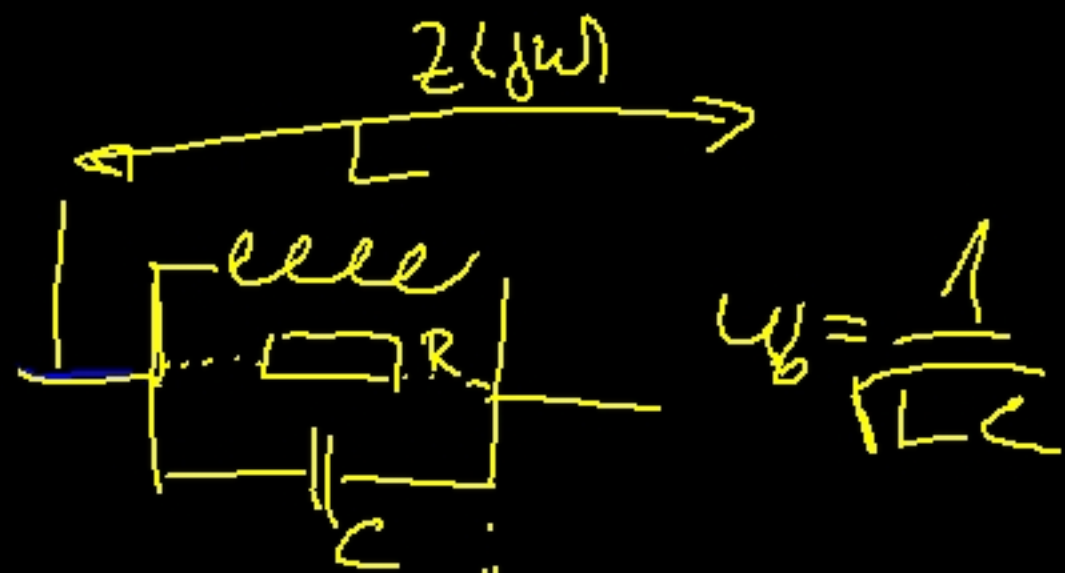


$$y(s) \quad V(z) = \frac{z(s)}{y(s)}$$

$$|V(j\omega)| = ?$$

$x=l$
 USnica $z(s)$





bez gub.
za $R = \infty \Rightarrow BW = 0$
(idealni rezonator)

VT... VIZ rezonatori
svaki je opisan sa cent. frek.
Širinom pojasa BW

