Contoh:

$R = 282\ k\Omega \qquad L = 288\ mH$

$\xi = \frac{R}{2}\sqrt{\frac{C}{L}} \longrightarrow \xi = 1$ (critically damped)

$$\frac{282 * 10^3}{2}\sqrt{\frac{C}{288 * 10^{-3}}} = 1$$

$$C = 288 * 10^{-3}\left(\frac{2}{282 * 10^3}\right)^2 F$$

$= 14,486\ pF$

Utk $\xi = 1$

$$G(s) = \frac{K}{(s+a)^2} \longrightarrow K = \frac{1}{LC} = \frac{1}{288 * 10^{-3} * 14.486 * 10^{-12}}$$

$= 2,397 * 10^{11}$

$a = \sqrt{\frac{1}{LC}} = 489.591,68$

$V_i(s) = \frac{10}{s} \longrightarrow V_c(s) = G(s).V_i(s) = \frac{10K}{s(s+a)^2}$