

$$C := 450 \cdot 10^{-6} \text{ F}$$

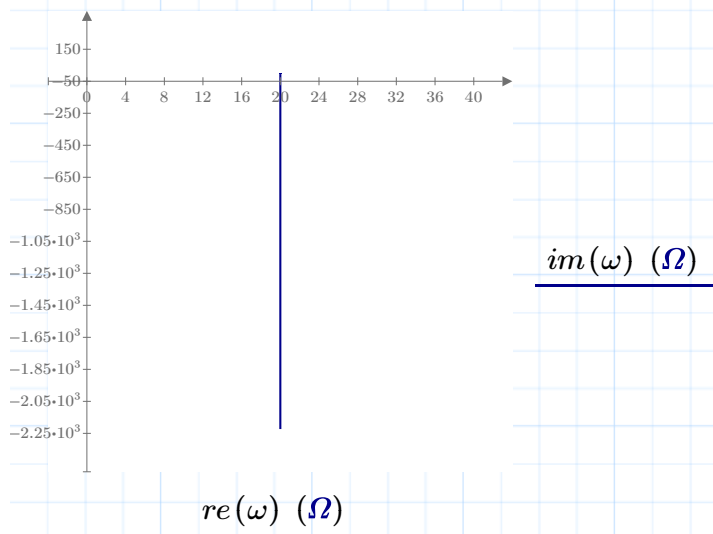
$$L := 0.5 \text{ H}$$

$$R := 20 \text{ } \Omega$$

$$\omega := 0,1 \text{ s}^{-1} .. 10000 \text{ s}^{-1}$$

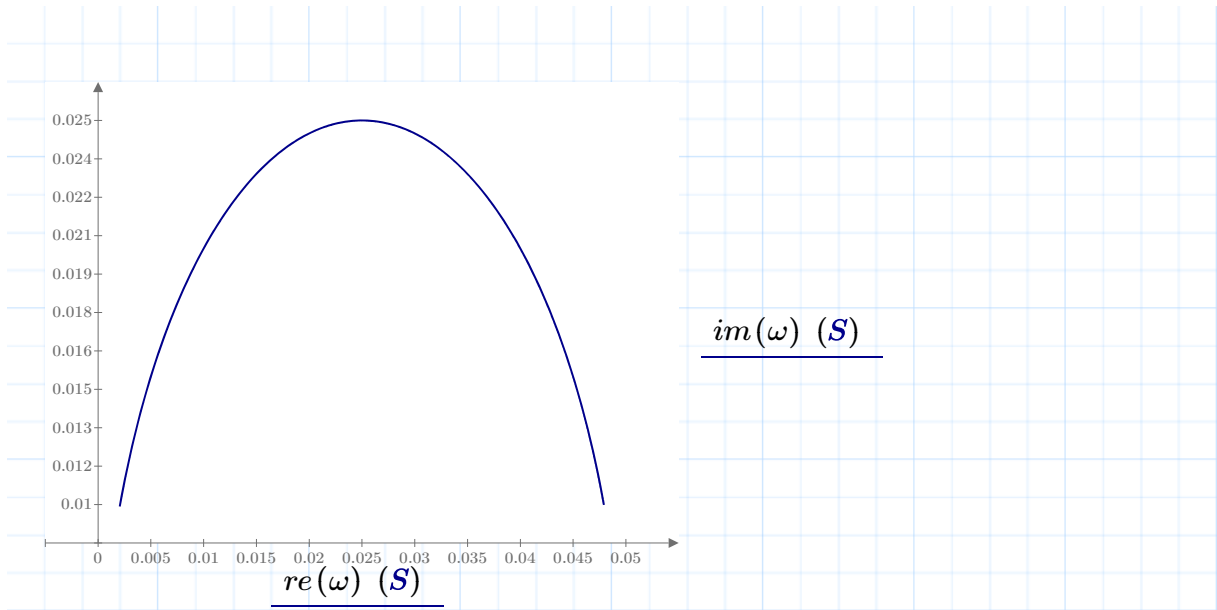
$$re(\omega) := R$$

$$im(\omega) := \frac{-1}{\omega \cdot C}$$



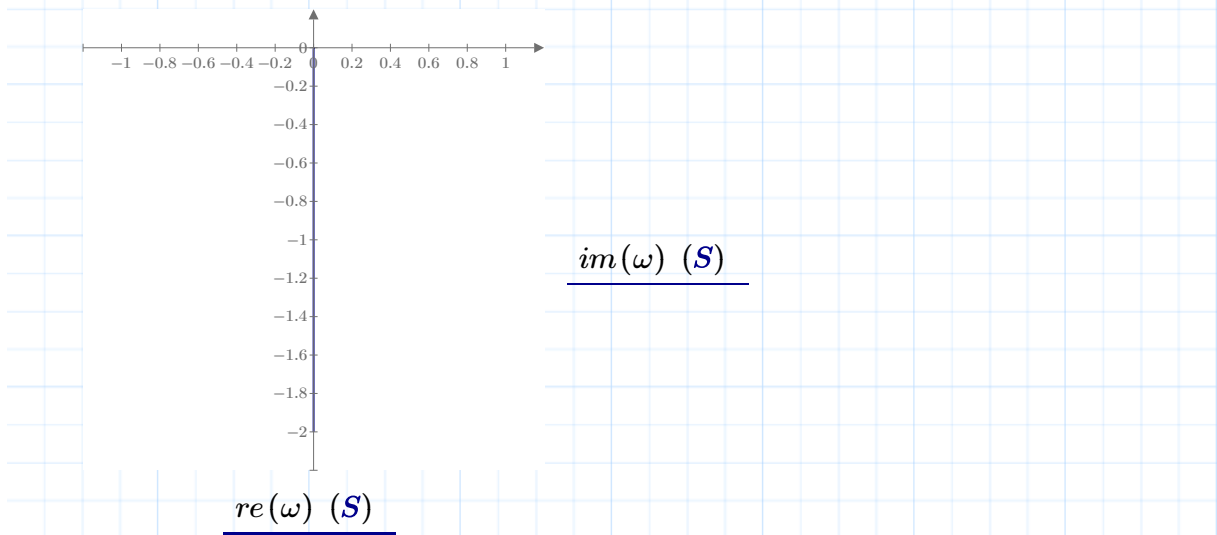
$$re(\omega) := \frac{R}{R^2 + \left(\frac{1}{\omega \cdot C}\right)^2}$$

$$im(\omega) := \frac{\frac{1}{\omega \cdot C}}{R^2 + \left(\frac{1}{\omega \cdot C}\right)^2}$$



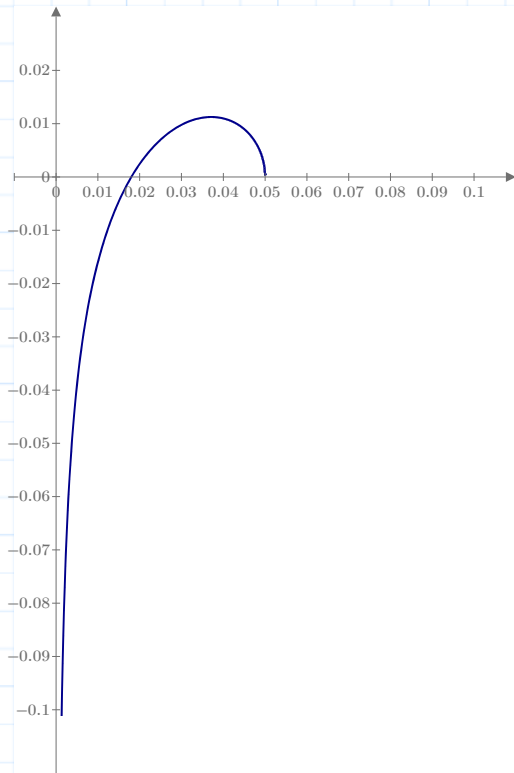
$$re(\omega) := 0$$

$$im(\omega) := \frac{-1}{\omega \cdot L}$$



$$im_y(\omega) := \frac{\frac{1}{\omega \cdot C}}{R^2 + \left(\frac{1}{\omega \cdot C}\right)^2} - \frac{1}{\omega \cdot L}$$

$$re_y(\omega) := \frac{R}{R^2 + \left(\frac{1}{\omega \cdot C}\right)^2}$$



$im_y(\omega)$ (S)

$re_y(\omega)$ (S)

$$re_z(\omega) := \frac{re_y(\omega)}{(re_y(\omega))^2 + (im_y(\omega))^2}$$

$$im_z(\omega) := \frac{-im_y(\omega)}{(re_y(\omega))^2 + (im_y(\omega))^2}$$

