



Den parallelle komponent placeres ved den højeste impedans

$$R_p := 100 \, \Omega$$

$$R_s := 20 \, \Omega$$

$$Q_s := \sqrt{\frac{R_p}{R_s}} - 1 = 2$$

$$Q_p := Q_s$$

$$X_p := \frac{R_p}{Q_p} = 50 \, \Omega$$

$$X_s := Q_s \cdot R_s = 40 \, \Omega$$

Bestem L og C i lavpas impedans tilpasningen

$$X_p = \frac{1}{250 \, \text{MHz} \cdot 2 \pi \cdot C} \xrightarrow{\text{solve, } C} \frac{1}{25000 \cdot \pi \cdot \text{MHz} \cdot \Omega} = 12.7 \, \text{pF}$$

$$X_s = 250 \, \text{MHz} \cdot 2 \pi \cdot L \xrightarrow{\text{solve, } L} \frac{2 \cdot \Omega}{25 \cdot \pi \cdot \text{MHz}} = 25.5 \cdot 10^{-9} \, \text{H}$$