$l\_match(25 \cdot \_ohm, 50 \cdot \_ohm, 450 \cdot \_MHz)$

Low Pass LC L−Match

Cp $\|$ 50.$\cdot$ _Ω

Ls in series with 25.$\cdot$ _Ω

Q=1.

BW=450.$\cdot$ _MHz

Cp= 7.07355$\cdot$ _pF or 7.07355ᴇ⁻12$\cdot$ _F

Ls= 8.84194$\cdot$ _nH or 8.84194ᴇ⁻9$\cdot$ _henry

Done

$pi\_match(25 \cdot \_ohm, 50 \cdot \_ohm, 450 \cdot \_MHz, 10 \cdot \_MHz)$

Low Pass LC π−Match

Cin $\parallel 25. \cdot \_\Omega$

Cout $\parallel 50. \cdot \_\Omega$

Ls in series between Cin & Cout

Qt$= 45.$

Ri$= 0.002118 \cdot \_\Omega$

Qin$= 108.632$

Qout$= 153.632$

Ls$= 0.033714 \cdot \_$nH or $3.3714\text{E-}11 \cdot \_$henry

Cin$= 1536.82 \cdot \_$pF or $1.53682\text{E-}9 \cdot \_$F

Cout$= 1086.72 \cdot \_$pF or $1.08672\text{E-}9 \cdot \_$F

Done

t_match$(25 \cdot \_ohm, 50 \cdot \_ohm, 450 \cdot \_MHz, 10 \cdot \_MHz)$

Low Pass LC T−Match

Lin $\parallel 25. \cdot \_\Omega$

Lout $\parallel 50. \cdot \_\Omega$

Cs in series bteween Lin & Lout

Qt$= 45.$

Ri$= 590093. \cdot \_\Omega$

Qin$= 153.632$

Qout$= 108.632$

Cs$= 0.026971 \cdot \_pF$ or $2.69712\text{E}^-14 \cdot \_F$

Lin$= 1358.4 \cdot \_nH$ or $0.000001 \cdot \_henry$

Lout$= 1921.03 \cdot \_nH$ or $0.000002 \cdot \_henry$

Done

$tap\_cap\_match(25 \cdot \_ohm, 50 \cdot \_ohm, 450 \cdot \_MHz, 10 \cdot \_MHz)$

Tapped Cap LC Match

Lin $\parallel 50. \cdot \_\Omega$

Cs in series between Lin & Cout

Cout $\parallel 25. \cdot \_\Omega$

Qt $= 45.$

Lin $= 0.392975 \cdot \_nH$ or $3.92975\text{E-}10 \cdot \_henry$

Qout $= 31.8119$

Cout $= 450.047 \cdot \_pF$ or $4.50047\text{E-}10 \cdot \_F$

Cs $= 1086.67 \cdot \_pF$ or $1.08667\text{E-}9 \cdot \_F$

Done

$tap\_ind\_match\left(25\cdot \_ohm, 50\cdot \_ohm, 450\cdot \_MHz, 10\cdot \_MHz\right)$

Tapped Ind LC Match

Cin $\|\, 50.\cdot \_\Omega$

Ls in series between Cin & Lout

Lout $\|\, 25.\cdot \_\Omega$

Qt $= 45.$

Cin $= 318.31\cdot \_pF$ or $3.1831\text{E}^{-}10\cdot \_F$

Qout $= 31.8119$

Lout $= 0.277944\cdot \_nH$ or $2.77944\text{E}^{-}10\cdot \_henry$

Ls $= 0.115112\cdot \_nH$ or $1.15112\text{E}^{-}10\cdot \_henry$

Done