



### Microstrip L1:

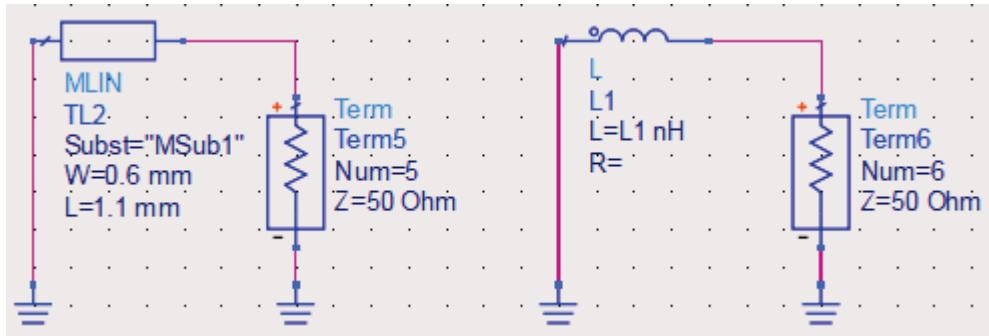


Figure 8: Microstrip L1 (Left hand side) and its equivalent Lumped Inductor (Right hand side)

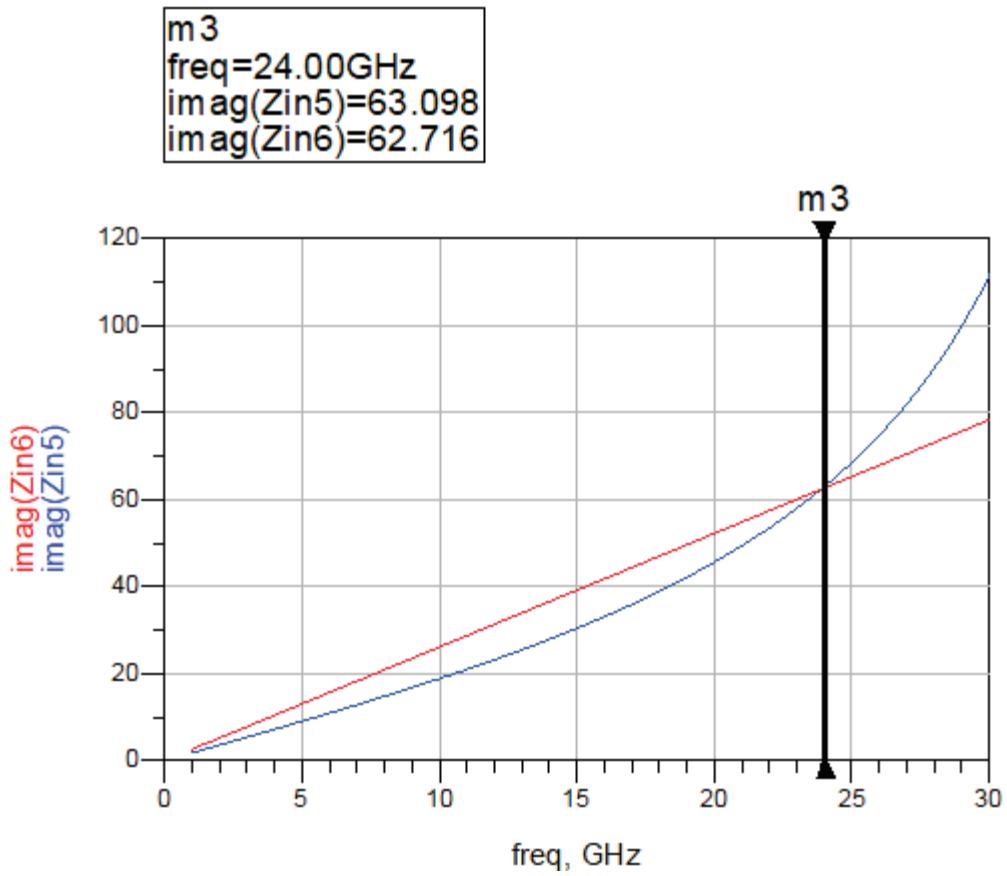


Figure 9: Reactance of Microstrip L1 (Zin5) and its equivalent Lumped Inductor (Zin6)

The equivalent Lumped Inductor (Zin6) could be calculated by:

$$L1 = \frac{X_L}{\omega} = \frac{X_L}{2\pi f} = \frac{Zin5}{2 * \pi * (24 * 10^9)} = 4.184316083 * 10^{-10} H \approx 0.418 nH$$