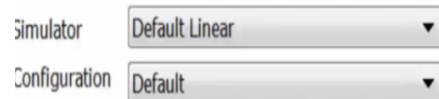
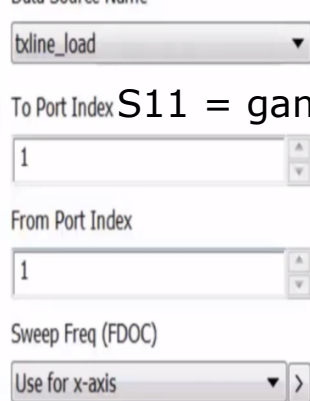


Scattering Coefficients (S Parameters)

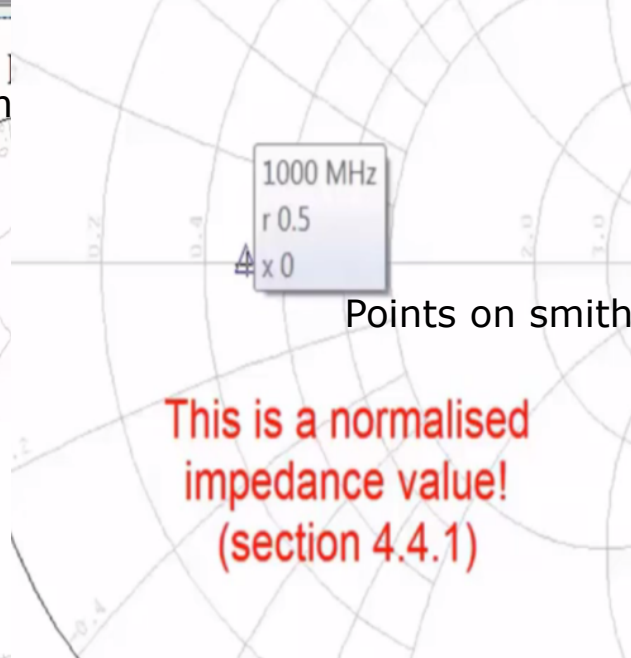


Complex Modifier

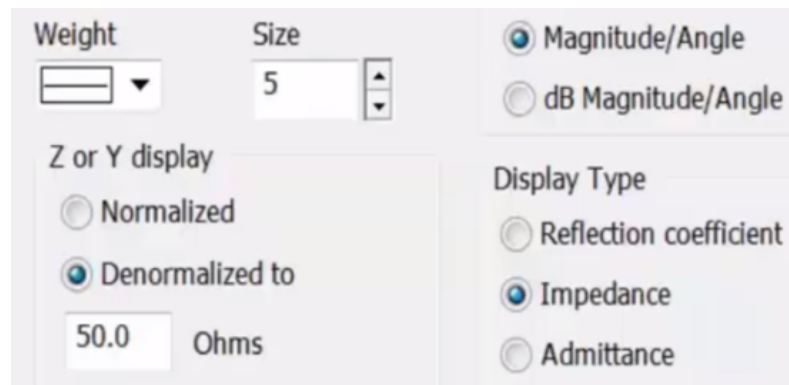


$S_{11} = \gamma_{in} = Z_{in}$

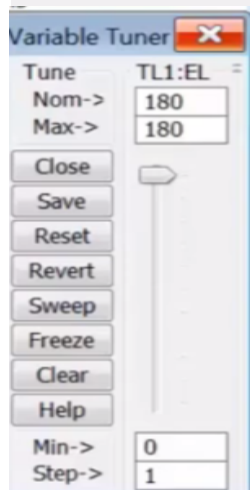
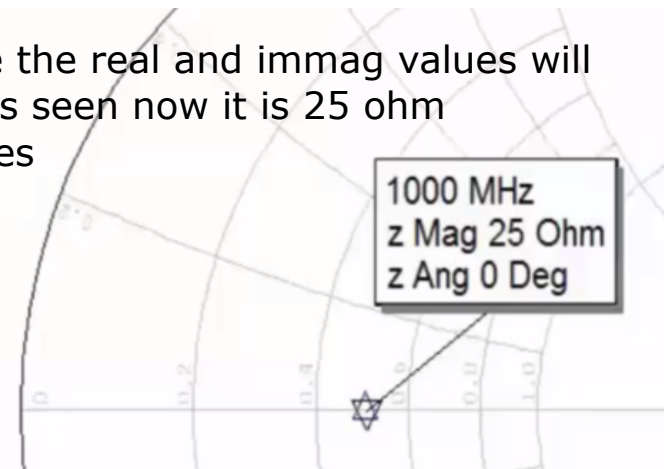
$$Z_{IN}(\theta) = Z_0 \frac{1 + \Gamma(\theta)}{1 - \Gamma(\theta)}, \quad \theta = EL$$



Points on smith



if we make denormalize the real and immag values will change to ohm value as seen now it is 25 ohm this on marker properties



EL tune leads to move around

