

Fig. 7. The layout of the quarter path shown in Fig. 6 and its detailed description (all impedances are odd-mode impedances). The frequency range of the impedances in the Smith chart ($Z_o=100 \Omega$) is 40-50 GHz.

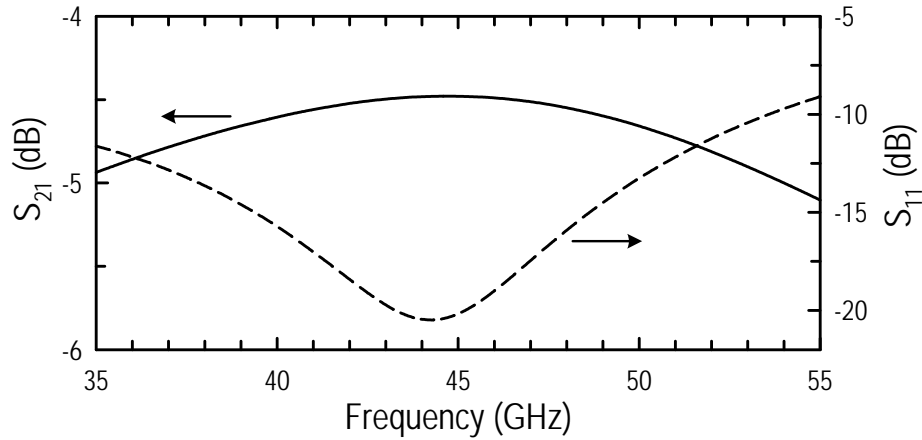


Fig. 8. The simulated S_{21} and input reflection coefficient (S_{11}) of the passive 1:8 tee-junction divider. Input port impedance= 100Ω and output load impedance= $55-j65 \Omega$ at 45 GHz. The S_{21} does not include the 9 dB 1:8 splitter loss. (Port-1: input port, Port-2: one of the 8 output ports).