ECE424F MICROWAVE CIRCUITS

Homework #6

1. Find expressions for the scattering matrix of a transmission-line with length **d,** characteristic impedance $\mathbf{Z_1}$ and propagation constant β. The S-parameters refer to an impedance level of $\mathbf{Z_o}$.

2. Synthesize a two-port passive, reciprocal and lossless transmission-line network with the following scattering parameters: $\mathbf{S_{11} = S_{22} = 0.2\angle 108^o}$.

3. Problems 4.8, 4.16 and 4.24 in textbook.