Abstracts

Computer-Aided Analysis and Design of Networks Containing Commensurate and Noncommensurate Delay Lines

M.I. Sobhy and M.H. Keriakos. "Computer-Aided Analysis and Design of Networks Containing Commensurate and Noncommensurate Delay Lines." 1980 Transactions on Microwave Theory and Techniques 28.4 (Apr. 1980 [T-MTT]): 348-358.

Several computer programs are described for the analysis and synthesis of networks containing transmision lines, lumped resistors, voltage sources and current sources. There are no restrictions on the topology of the networks and degenerate elements can also be included. In the noncommensurate case the transmission lines could have different delays and thus the degree of freedom for each network is doubled. State-space techniques are used to formulate the solution to the problem and the high degree of generality was achieved by using topological methods to derive the state equations. Several examples are given.

❑ Return to main document.