

Abstracts

A Generalized Design Technique for Practical Distributed Reciprocal Ladder Networks

R. Levy. "A Generalized Design Technique for Practical Distributed Reciprocal Ladder Networks." 1973 *Transactions on Microwave Theory and Techniques* 21.8 (Aug. 1973 [T-MTT]): 519-526.

A generalized design approach is presented for ladder networks consisting of a cascade of constituent two-port networks connected by short lengths of transmission lines. The design is made possible by the derivation of simple equations which define the inverter impedance and associated reference planes of any passive lossless reciprocal two-port. This enables the general ladder network to be equated to a prototype network at a reference frequency. An example is given of the design of a coaxial low-pass filter where fringing capacitances are compensated automatically.

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