Abstracts

The Design of Discrete N-Section and Continuously Tapered Symmetrical Microwave TEM Directional Couplers

D.W. Kammler. "The Design of Discrete N-Section and Continuously Tapered Symmetrical Microwave TEM Directional Couplers." 1969 Transactions on Microwave Theory and Techniques 17.8 (Aug. 1969 [T-MTT] (Special Issue on Computer-Oriented Microwave Practices)): 577-590.

A method is presented for the computer-aided design of either N-section discrete or continuously tapered symmetrical microwave couplers. The coupling distribution function k(x) is parametrized in the form k(x, p/spl ovbr/), and a special optimization process (of the generalized Remez type) is used to determine the set of parameters p/spl ovbr/ which produce an optimum power coupling response. Standard parametric forms based on an approximate Fourier analysis as well as more general spline parametric forms for k(x, p/spl ovbr/) are developed and illustrated.

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