Abstracts

The Design of Coupled Microstrip Lines

S. Akhtarzad, T.R. Rowbotham and P.B. Johns. "The Design of Coupled Microstrip Lines." 1975 Transactions on Microwave Theory and Techniques 23.6 (Jun. 1975 [T-MTT]): 486-492.

Although graphical results and formulas are available for the design of microstrip couplers, the design procedure is hampered because even- and odd-mode impedances are always expressed in terms of the physical geometry. In practice the designer obtains these impedances and then requires to know the geometry given by them. A new design procedure for coupled parallel microstrip lines is therefore presented. The technique enables the geometry of the coupled lines to be obtained directly from the required even- and odd-mode impedances and uses single microstrip-line geometry as an intermediate step. The results are presented in graphical form using only two universal families of curves. Results are also presented in the form of simple formulas for design programs and also comparisons with practical results are made.

❑ Return to main document.