

# Abstracts

## A Synthesis Procedure for Designing 90° Directional Couplers with a Large Number of Sections

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*B. Ulriksson. "A Synthesis Procedure for Designing 90° Directional Couplers with a Large Number of Sections." 1982 Transactions on Microwave Theory and Techniques 30.8 (Aug. 1982 [T-MTT]): 1216-1219.*

A synthesis method for designing symmetrical directional couplers with an arbitrary realizable coupling is described. The method is based on a transformation of the coupling to the time domain, where the couplings of the different sections are easily identified. The fundamental operation of the method is the Fast Fourier Transform, which makes it very efficient in computer time and memory requirements. The method is illustrated by the design of a  $8.34 \pm 0.3$ -dB equal-ripple coupler with 201 sections.

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