

# Abstracts

## Modeling of a Coaxial-Waveguide Power-Combining Structure

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*M.E. Bialkowski. "Modeling of a Coaxial-Waveguide Power-Combining Structure." 1986 Transactions on Microwave Theory and Techniques 34.9 (Sep. 1986 [T-MTT]): 937-942.*

The modeling of the Kurokawa-Magalhaes power-combiner mounting structure is presented. The combiner is regarded as a four-port network with the ports created at the coaxial-waveguide apertures. By using a radial-modal wave approach, the admittance matrix for this network is determined. The theory is verified through an alternative approach based on the equivalence between a coaxial-waveguide junction and a dual-gap post structure.

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