

Abstracts

Analysis and Design of a Circular Disc 3-dB Coupler (Comments)

M.D. Abouzahra. "Analysis and Design of a Circular Disc 3-dB Coupler (Comments)." 1995 Transactions on Microwave Theory and Techniques 43.1 (Jan. 1995 [T-MTT]): 239-239.

In a recent paper, Bialkowski and Jellett discussed the design of a broadband 3-dB quadrature hybrid. This hybrid is comprised of 4-port microstrip disc. It appears that the authors were able to increase the operational bandwidth of the circular disc 3-dB quadrature coupler to about 20%. Open and short-circuited stubs were introduced to the periphery of the coupler in order to realize a broader bandwidth. This technique was applied previously by Riblet and Ohta on planar components and broader operational bandwidth were realized. In addition to listing few corrections, I would like to respond to some inaccurate statements made in [1] by offering the following comments.

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