

Abstracts

3-dB Couplers Constructed from Two Tandem Connected 8.34-dB Asymmetric Couplers (Correspondence)

H.J. Hindin and A. Rosenzweig. "3-dB Couplers Constructed from Two Tandem Connected 8.34-dB Asymmetric Couplers (Correspondence)." 1968 Transactions on Microwave Theory and Techniques 19.2 (Feb. 1968 [T-MTT]): 125-126.

The technique of tandeming two symmetric 8.34-dB directional couplers to produce a 3-dB coupler has been described. This technique is useful because broadband 3-dB couplers are difficult to synthesize directly, due to the impedance levels involved. This correspondence shows that it is possible to tandem connect two asymmetric 8.34-dB couplers to yield a broadband 3-dB device. Design tables for 8.34-dB asymmetric couplers which give the normalized even-mode impedances required for a given ripple, number of sections, and bandwidth are also presented.

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