Abstracts

Measuring the Directivity of a Directional Coupler Using a Sliding Short-Circuit and an Adjustable Sliding Termination (Correspondence)

R.W. Beatty. "Measuring the Directivity of a Directional Coupler Using a Sliding Short-Circuit and an Adjustable Sliding Termination (Correspondence)." 1964 Transactions on Microwave Theory and Techniques 12.3 (May 1964 [T-MTT]): 383-383.

A method for measuring the directivity of directional couplers has been previously described in which one uses an adjustable sliding termination and a sliding short-circuit. One first adjusts the tuner shown in Fig. 1 so as to eliminate multiple reflections in the waveguide in which the sliding terminations are inserted. Then one determines the ratio of two detector outputs, first the average level as the short-circuit slides in the waveguide and second the level obtained when the sliding termination is adjusted for zero reflection. An alternate procedure substitutes for this second level that which is obtained when the sliding termination is first adjusted to produce a detector null and is then slid without further adjustment until the detector output is maximum.

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