

Abstracts

Theory of Unidirectionality and Conjugate Matching in Three-Port Time-Varying Reactance Circuits (Correspondence)

A.E. Fantom. "Theory of Unidirectionality and Conjugate Matching in Three-Port Time-Varying Reactance Circuits (Correspondence)." 1967 Transactions on Microwave Theory and Techniques 15.5 (May 1967 [T-MTT]): 318-320.

In recent years interest has been shown in parametric circuits having special properties such as unidirectionality and conjugate matching. This correspondence discusses the properties of a particular class of such circuits; viz., those which may be regarded as a three-port time-varying reactance circuit terminated by complex impedances. The theory is presented in terms of characteristic terminations, to which constraints imposed by the Manley-Rowe relations are applied. Applications of the theory include the synthesis of a three-port time-varying reactance circulator and of unidirectional and conjugately matched amplifiers.

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