

Abstracts

Scattering Matrix for an N-Port Power-Divider Junction (Correspondence)

O.R. Price and M. Leichter. "Scattering Matrix for an N-Port Power-Divider Junction (Correspondence)." 1960 Transactions on Microwave Theory and Techniques 8.6 (Nov. 1960 [T-MTT]): 669-669.

During the course of an investigation of a data-processing technique yielding effectively reduced sidelobes and beamwidth for a microwave radar antenna, the need arose for multiport power dividers. In order to avoid an undesirable decrease in the signal-to-noise ratio, it was necessary that these dividers waste no power. Consequently, a scattering matrix was sought which would have the obvious requirement that there be no wave reflected in the input port and which would allow the power to be divided into arbitrary but fixed relative parts.

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