

Abstracts

Noise Waves and Passive Linear Multiports

S.W. Wedge and D.B. Rutledge. "Noise Waves and Passive Linear Multiports." 1991 Microwave and Guided Wave Letters 1.5 (May 1991 [MGWL]): 117-119.

A simple derivation is given for the relation between a passive circuit's noise wave correlation matrix and its scattering matrix. It is shown that this relation, referred to as Bosma's theorem, comes readily from the fundamental principle that a passive multiport in thermodynamic equilibrium with reflectionless terminations produces uncorrelated output waves.

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