Abstracts

Mutual Impedance between Probes in a Waveguide

B. Wang. "Mutual Impedance between Probes in a Waveguide." 1988 Transactions on Microwave Theory and Techniques 36.1 (Jan. 1988 [T-MTT]): 53-60.

The general formulas of mutual impedance between two probes arbitrarily located in a rectangular waveguide are given by means of dyadic Green's function (DGF), field transformation, and reaction concept. The waveguide is semi-fininite. The reflection coefficient at the terminal plane (z = 0) is Gamma. Lengths, feeding points, and orientations of the two probes in the waveguide are all arbitrary. As examples, expressions of mutual impedance for eight specific cases are given and discussed.

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