

Abstracts

Improved Large Aperture Waveguide Coupling Theory

R. Levy. "Improved Large Aperture Waveguide Coupling Theory." 1979 MTT-S International Microwave Symposium Digest 79.1 (1979 [MWSYM]): 431-433.

Bethe's small aperture coupling theory, modified by Cohn for large coupling apertures, is improved by including correction terms obtained by averaging the fields over the large aperture. Additionally, inclusion of nonempirical thickness correction factors derived previously by McDonald give coupling formulas which result in theoretical predictions for multi-aperture couplers substantially in exact agreement with experiment (correcting small discrepancies previously noted by the author in a 1968 paper).

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