

Abstracts

Mutual Coupling Between Parallel Plate Waveguides (1973 [MWSYM])

Y.S. El-Moazzen and L. Shafai. "Mutual Coupling Between Parallel Plate Waveguides (1973 [MWSYM])." 1973 G-MTT International Microwave Symposium Digest of Technical Papers 73.1 (1973 [MWSYM]): 281-283.

Coupling between parallel plate waveguides is investigated using the Wiener-Hopf technique. For a TE_{0,1} excitation of one guide, exact solutions for the radiate, reflected and transmitted fields are found and are expressed by three terms. One term is due to the exciting waveguide alone and the other two are due to interaction between two waveguides. The expressions for the exact solutions are further reduced to derive approximate solutions, which could be obtained using the ray theory of diffraction with a modified diffraction coefficient.

[Return to main document.](#)