

Abstracts

Dispersion Characteristics of Strip Dielectric Waveguides (Short Papers)

K.S. Chiang. "Dispersion Characteristics of Strip Dielectric Waveguides (Short Papers)." 1991 Transactions on Microwave Theory and Techniques 39.2 (Feb. 1991 [T-MTT]): 349-352.

A simple and accurate dispersion relation is derived for the guided modes of a strip dielectric waveguide. This relation shows explicitly the effect of the width of the waveguide and involves only the solution for a single three-layer slab waveguide. It is discovered that there always exists a strip waveguide with a specific aspect ratio in which the $E_x^{\text{over } mn}$ and $E_y^{\text{over } mn}$ modes propagate at the same phase velocity.

 [Return to main document.](#)