

Abstracts

Analysis of Wave Propagation in Inhomogeneous Dielectric Slab Waveguides

H. Ikuno. "Analysis of Wave Propagation in Inhomogeneous Dielectric Slab Waveguides." 1978 Transactions on Microwave Theory and Techniques 26.4 (Apr. 1978 [T-MTT]): 261-266.

The propagation characteristics of the guided modes in an inhomogeneous dielectric slab waveguide are analyzed by the regularized WKBJ method. The corrected propagation constants of the guided modes in a near parabolic index medium are derived in analytic form. The effects of the refractive index profile and the homogeneous cladding on the guided modes can be expressed in terms of the mode indices and evaluated numerically.

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