

Abstracts

Analysis of Single and Coupled Rectangular Dielectric Waveguides

U. Crombach. "Analysis of Single and Coupled Rectangular Dielectric Waveguides." 1981 Transactions on Microwave Theory and Techniques 29.9 (Sep. 1981 [T-MTT] (Special Issue on Open Guided Wave Structures)): 870-874.

Single and coupled rectangular dielectric waveguides are analyzed by means of the mode-matching technique. Dispersion characteristics are given for dominant modes of the inverted stripline and rib waveguides. The propagation constant for E_{y11} -mode of the inverted strip line is found to become less than the lowest limit for guidance above a certain frequency. Influence of frequency and dielectric constant of the rib on the normalized coupling length of two coupled rib waveguides is investigated.

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