

Propagation in Rectangular Waveguides with Arbitrary Internal and External Media

J.B. Andersen, S. Berntsen and P. Dalsgaard. "Propagation in Rectangular Waveguides with Arbitrary Internal and External Media." 1975 Transactions on Microwave Theory and Techniques 23.7 (Jul. 1975 [T-MTT]): 555-560.

The propagation characteristics of electromagnetic waves in a rectangular waveguide of a homogeneous medium embedded in a different medium have been found approximately. The total field is assumed to consist of four crossing plane waves interconnected at the boundaries by reflection matrices. The method is more accurate than other approximate techniques. New results are presented for tunnel propagation and attenuation of degenerate modes in metallic waveguides.

 [Return to main document.](#)