

Abstracts

Square and Rectangular Waveguides with Rounded Corners

P. Lagasse and J. Van Bladel. "Square and Rectangular Waveguides with Rounded Corners." 1972 Transactions on Microwave Theory and Techniques 20.5 (May 1972 [T-MTT]): 331-337.

Eigenfunctions, eigenvalues, and attenuation constants in waveguides are determined for the square with rounded corners, and for the cigar-shaped rectangle with rounded ends. These cross sections allow, by continuous variation of a parameter, the investigation of the deformation of the modes and attenuation curves of a circular waveguide. Particular attention is given to the H_{01} mode and its remarkable attenuation curve.

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