Abstracts

Correct Determination of TE and TM Cutoff Wavenumbers in Transmission Lines with Circular Outer Conductors and Eccentric Circular Inner Conductors (Short Papers)

The cutoff wavenumbers of TE and TM modes (higher order modes) in transmission lines with circular outer conductors and eccentric circular inner conductors are carefully evaluated. The correctness of Kuttler's bounds is confirmed and the reason why some of the values obtained lie outside the bounds and some of the modes could not be found in Vishen's paper is given. A reliable technique for accurately determining the roots of an analytical function is proposed for finding cutoff wavenumbers in such a way as to avoid missing any modes.

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