

# Abstracts

## High-Accuracy Numerical Data on Propagation Characteristics of alpha-Power Graded-Core Fibers

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K. Oyamada and T. Okoshi. "High-Accuracy Numerical Data on Propagation Characteristics of alpha-Power Graded-Core Fibers." 1980 *Transactions on Microwave Theory and Techniques* 28.10 (Oct. 1980 [T-MTT]): 1113-1118.

High-accuracy data of normalized cutoff frequencies, propagation constants, and delay time of LP<sub>sub m1</sub> modes for alpha-power graded-core fibers ( $\alpha = 1, 2, 4$ , and  $10$ ) are obtained by using two entirely different methods: power-series expansion and finite element methods, and the results are compared. The difference between cutoff frequencies obtained by these methods is less than 0.005 percent for most of the LP modes. The obtained data are accurate enough to be used as the standard for estimating the accuracy of other various analyses.

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