

# Abstracts

## Modal Analysis of Open Groove Waveguide (Short Papers)

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S.F. Mahmoud. "Modal Analysis of Open Groove Waveguide (Short Papers)." 1990  
*Transactions on Microwave Theory and Techniques* 38.4 (Apr. 1990 [T-MTT]): 437-439.

A self-contained analysis for lower order modes in the open groove waveguide is presented. By adopting an approximate form for the fields in the outer region of the guide and then performing the remainder of the analysis rigorously, closed-form results for the fields and modal equation are obtained. The analysis allows a simple transverse network representation which can be compared with that obtained by Oliner and Lamariello. Universal dispersion curves, obtained numerically for the dominant mode, are presented.

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