

# Abstracts

## A New Class of Basis Functions for the Solution of the E-Plane Waveguide Discontinuity Problem

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*M.-S. Leong, P.S. Kooi and Chandra. "A New Class of Basis Functions for the Solution of the E-Plane Waveguide Discontinuity Problem." 1987 Transactions on Microwave Theory and Techniques 35.8 (Aug. 1987 [T-MTT]): 705-709.*

A class of basis functions which satisfies the edge condition explicitly is presented to improve the convergence of the mode-matching method. Using these basis functions, we analyse the 2-to-1 E-plane junction, make comparisons with other available methods of solution, and provide correction terms for its quasi-static solution.

[Return to main document.](#)