

# Abstracts

## Coupling of Waveguides through Large Apertures

*V.M. Pandharipande and B.N. Das. "Coupling of Waveguides through Large Apertures." 1978 Transactions on Microwave Theory and Techniques 26.3 (Mar. 1978 [T-MTT]): 209-212.*

A closed form expression for the equivalent network of a narrow transverse slot in the common broadwall between two waveguides is derived in terms of self-reaction and discontinuity in modal voltage. The coupling is expressed in terms of equivalent circuit parameter. A comparison between theoretical results with those obtained from the results of Levinson and Fredberg (for slot length  $> 0.4a$ , where  $a$  is the broad dimension of the waveguide), the results obtained from the formula of Sangster and the experimental results are presented.

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