# Abstracts

## A Discussion on the Coupling Effects in Conductor-Backed Coplanar Waveguide MIC's with Lateral Sidewalls

*M.A. Magerko, L. Fan and K. Chang. "A Discussion on the Coupling Effects in Conductor-Backed Coplanar Waveguide MIC's with Lateral Sidewalls." 1993 MTT-S International Microwave Symposium Digest 93.2 (1993 Vol. II [MWSYM]): 947-950.*

Conductor-backed coplanar waveguide (CBCPW) with lateral sidewalls can support rectangular waveguide modes that couple with the dominant mode and can produce several undesirable results. These modes can be cutoff by reducing the lateral dimensions of the structure but for higher frequency operation the available circuit surface area is severely limited. The CBCPW is analyzed with a two-dimensional spectral domain method to demonstrate these coupling effects and the results provide insight to the characteristics of finite length structures.

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