# Abstracts

## A Novel Aperture Isolation Circuit for Use in Phased Array Systems

*A.W. Jacomb-Hood, M.S. Booth, D.E. Houston and T. Alcorn. "A Novel Aperture Isolation Circuit for Use in Phased Array Systems." 1990 Transactions on Microwave Theory and Techniques 38.12 (Dec. 1990 [T-MTT] (1990 Symposium Issue)): 1994-2000.*

A novel electronically controlled matching network has been demonstrated as an aperture isolation circuit. This approach offers smaller size, lower weight, and potentially lower cost than circulators. An X-band MMIC realization of this circuit has comparable loss to a circulator. An S-band hybrid realization demonstrated reductions in insertion loss of up to 2.3 dB for antenna VSWR's of up to 5:1 lying within a 100° sector on the Smith chart.

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