# Abstracts

## A planar orthomode transducer

*R.W. Jackson. "A planar orthomode transducer." 2001 Microwave and Wireless Components Letters 11.12 (Dec. 2001 [MWCL]): 483-485.*

The planar orthomode transducer (OMT) described in this paper couples two microstrip inputs to two orthogonal modes in a square waveguide. One microstripline feeds a 180/spl deg/ hybrid that in turn excites two waveguide probes. A second microstrip directly feeds a third waveguide probe. Mode symmetry provides isolation between the two feeds. All circuitry and probes are fabricated on a single substrate to minimize fabrication cost. An experimental prototype has 30 to 40 dB isolation at millimeter wave frequencies. The low cost and small size of this structure make it appropriate for use in commercial communications applications.

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