

# Abstracts

## TE/sub 01/ Mode Components in the 3-mm Region

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A.J. Simmons. "TE/sub 01/ Mode Components in the 3-mm Region." 1963 *Transactions on Microwave Theory and Techniques* 11.5 (Sep. 1963 [T-MTT]): 324-332.

In the 3-mm region (94 Gc) it is desirable to use waveguide components operating in the low loss TE/sub 01/ mode in circular waveguide rather than in fundamental-mode rectangular waveguide. Because this is a higher mode, mode purity is of major concern. A method of identifying undesired modes and their amplitudes is by means of radiation patterns from the end of the waveguide. Components developed to operate in this mode include a transition from rectangular to circular waveguide, standing wave detector, variable attenuator, directional coupler, flexible waveguide, fixed 90° bend and rotary joint.

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