Abstracts

Experimental Investigation with an Iris Beam Waveguide (Correspondence)

J.W. Mink. "Experimental Investigation with an Iris Beam Waveguide (Correspondence)." 1969 Transactions on Microwave Theory and Techniques 17.1 (Jan. 1969 [T-MTT]): 48-49.

Iris beam waveguides appear attractive from the viewpoint of simplicity. However, their dimensions in wavelengths are so large that they warrant consideration only for infrared or optical frequencies provided the alignment requirement is not too stringent. Previous experiments by Christian and Goubau have shown that the measured diffraction loss of these guides is in good agreement with theoretical expectations. The measurements reported in this correspondence were made with the primary purpose of obtaining information on the effect of alignment of the irises, the width of the iris frames, and the curvature of the guide axis on the transmission loss.

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