

Abstracts

Experimental Study of the W-Band Dielectric-Guide Y-Branch Interferometer

A. Axelrod and M. Kisliuk. "Experimental Study of the W-Band Dielectric-Guide Y-Branch Interferometer." 1984 *Transactions on Microwave Theory and Techniques* 32.1 (Jan. 1984 [T-MTT]): 46-50.

Applicability of a W-band dielectric-guide Y-branch (DGY) interferometer as a modulator, switching element for the millimeter-wave planar dielectric-guide integrated circuits is established. The switching element includes a phase shifter formed by a metal wall proximate to a dielectric guide. The influence of the branches asymmetry on the on/off switching ratio was measured, found to comply with theory. On/off switching ratios of about 25 dB were obtained over a 98-104-GHz frequency range.

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