Abstracts

Mode-Discriminating Electrooptic Sampling for Separating Guided and Unguided Modes on Coplanar Waveguide

N.de B. Baynes, J. Allam and J.R.A. Cleaver. "Mode-Discriminating Electrooptic Sampling for Separating Guided and Unguided Modes on Coplanar Waveguide." 1996 Microwave and Guided Wave Letters 6.3 (Mar. 1996 [MGWL]): 126-128.

Mode-discriminating electrooptic sampling (MEOS) of coplanar waveguides was shown to discriminate between the symmetric quasi-TEM guided mode and asymmetric field distributions including unguided electromagnetic radiation. Radiation generated in a photoconductive switch and reflected from the back of the substrate was unambignously identified. Ultrafast sampling of devices showed features in the transmitted pulse due to multiple substrate reflections. These features are removed using MEOS, leading to increased accuracy in determination of s-parameters.

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