

## Millimeter-Wave Dielectric Image Line Detector-Circuit Employing Etched Slot Structure

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*K. Solbach. "Millimeter-Wave Dielectric Image Line Detector-Circuit Employing Etched Slot Structure." 1981 Transactions on Microwave Theory and Techniques 29.9 (Sep. 1981 [T-MTT] (Special Issue on Open Guided Wave Structures)): 953-957.*

In an earlier paper, slots in the ground plane are investigated as new circuit elements in dielectric image lines. In this paper slots in dielectric image lines employing metallized dielectric substrates as the ground plane are investigated. It is shown that this configuration can be used to realize truly integrated dielectric image line semiconductor circuits. As an example the design and performance of a detector circuit for 26 to 40 GHz is presented.

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