

Abstracts

Slots as New Circuit-Elements in Dielectric Image Line

K. Solbach and I. Wolff. "Slots as New Circuit-Elements in Dielectric Image Line." 1981 MTT-S International Microwave Symposium Digest 81.1 (1981 [MWSYM]): 8-10.

Slots in the ground plane of dielectric image lines are investigated as new circuit elements. This configuration has attracted attention for two applications: The dielectric image line above the slot can be designed to act as a shielding, thus reducing radiation losses if a diode is mounted above the slot e.g. in a detector- or mixer-circuit. On the other hand, similar to slots in metal waveguides, slots in the ground plane of dielectric image lines can be designed for antenna applications and even for nonradiating filter-structures.

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