

Abstracts

The Impedance of a Wire Grid Parallel to a Dielectric Interface

J.R. Wait. "The Impedance of a Wire Grid Parallel to a Dielectric Interface." 1957 Transactions on Microwave Theory and Techniques 5.2 (Apr. 1957 [T-MTT]): 99-102.

Analysis is given for the problem of reflection of a plane wave at oblique incidence on a wire grid which is parallel to a plane interface between two homogeneous dielectrics. It is assumed that the wire grid is a periodic structure and consists of thin cylindrical wires of homogeneous material. The equivalent circuit is derived where it is shown that the space on either side of the interface can be by a transmission line, and the grid itself is represented by a pure shunt element across one of the lines.

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