Abstracts

Analysis of a Microstrip Line Terminated with a Shorting Pin

W.-J. Tsay and J.T. Aberle. "Analysis of a Microstrip Line Terminated with a Shorting Pin." 1992 Transactions on Microwave Theory and Techniques 40.4 (Apr. 1992 [T-MTT]): 645-651.

A full-wave moment method solution to the problem of a semi-infinite microstrip line terminated with a shorting pin is presented. The electric current on the lint is expanded in terms of longitudinal piecewise sinusoidal modes near the open end, with entire domain traveling-wave modes to represent incident and reflected waves away from the open end. Also, the electric current near the shorting pin is simulated by an attachment mode which insures continuity of the current between the pin and the line and models the rapidly-varying current on the line near the feed connection point. Results are given for the magnitude of the reflection coefficient and are compared with experimental data.

❑ Return to main document.