

## Characterization of Shielded Coplanar Type Transmission Line Junction Discontinuities Incorporating the Finite Metallization Thickness Effect

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Frequency-dependent characteristics of shielded junction discontinuities between coplanar type transmission lines, coplanar waveguide (CPW) and finline, are analyzed by the mode-matching technique. Effect of finite metallization thickness is also incorporated in the analysis for the first time. Scattering parameters of finline step discontinuity are compared with existing data to confirm the accuracy of the approach. Numerical results for finline step discontinuity, shielded CPW step discontinuity and CPW-finline transition are presented.

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