Abstracts

Full-Wave Analysis of Coplanar Waveguide Discontinuities Using the Frequency Domain TLM Method

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This paper presents a full-wave analysis of a variety of coplanar waveguide discontinuities using the frequency domain TLM method. The finite metallization thickness is taken into account as well as metal losses and the interaction of fundamental and higher order modes between cascaded discontinuities. Numerical results are presented for the frequency-dependent s-parameters of transitions between CPW and slotline, CPW and microstrip line and CPW-microstrip overlap transition. The effect of interactions between the CPW discontiuuities and the CPW airbridges is also investigated.

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