Abstracts

A Full-Wave Analysis of Coplanar Waveguide-Slotline Transition

E. Vourch, M. Drissi, J. Citerne and V.F. Hanna. "A Full-Wave Analysis of Coplanar Waveguide-Slotline Transition." 1994 MTT-S International Microwave Symposium Digest 94.2 (1994 Vol. II [MWSYM]): 1309-1312.

In this paper a rigorous electromagnetic analysis of coplanar waveguide (CPW) to slotline transition is given using integral equations technique. The simulation of a bond wire on the CPW and a matched load at the ports of the transition is achieved through the modification of the generalized admittance matrix that result from the application of the method of moments. The scattering matrix elements can be calculated from the obtained field distribution. The numerical results are verified experimentally by measuring the scattering elements of a cascade of two transitions placed back to back.

❑ Return to main document.