Abstracts

A Coplanar-to-Microstrip Transition for W-Band Circuit Fabrication with 100-µm-Thick GaAs Wafers

B. Golja, H.B. Sequeira, S. Duncan, G. Mendenilla and N.E. Byer. "A Coplanar-to-Microstrip Transition for W-Band Circuit Fabrication with 100-µm-Thick GaAs Wafers." 1993 Microwave and Guided Wave Letters 3.2 (Feb. 1993 [MGWL]): 29-31.

Results on a via-hole interconnect that links a coplanar waveguide (CPW) on one side of a 100-mm thick GaAs substrate to a microstrip line on the opposite side are presented. The measured insertion loss of a pair of back-to-back connections is 0.3 dB between 26.5 and 40 GHz. A lumped-element equivalent circuit of this via-hole interconnect has been extrapolated to W-band and used to design amplifiers at 94 GHz.

❑ Return to main document.