Abstracts

Millimeterwave Coplanar Transmission Lines on Gallium Arsenide, Indium Phosphide and Quartz with Finite Metalization Thickness

W.H. Haydl, T. Kitazawa, J. Braunstein, R. Bosch and M. Schlechtweg. "Millimeterwave Coplanar Transmission Lines on Gallium Arsenide, Indium Phosphide and Quartz with Finite Metalization Thickness." 1991 MTT-S International Microwave Symposium Digest 91.2 (1991 Vol. II [MWSYM]): 691-694.

Coplanar lines for the millimeterwave frequency range are required to be of small dimensions, typically 25-50 µm (ground to ground spacing) for the W- and V-band respectively. The thickness of the metalization, typically 0.5 to several µm, cannot be neglected. The effect of the metalization on the impedance, propagation constant and attenuation is presented theoretically and experimentally for millimeterwave coplanar lines on gallium arsenide (GaAs), indiurn phosphide (InP) and quartz.

❑ Return to main document.