

Abstracts

Picosecond Characterization of Bent Coplanar Waveguides

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Picosecond electrical pulse propagation on Au coplanar waveguides fabricated on semi-insulating GaAs substrates has been analyzed. Propagation speed and signal distortion between the straight and bent transmission lines of different geometries were measured and compared with the aid of an electrooptic sampling system. The results indicate that the bent coplanar waveguides are capable of linking electronic devices operating in the sub-THz frequency regime. It is also found that smoothing of the bends can considerably improve high-frequency performance of these lines.

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