Abstracts

Slot Line Characteristics

E.A. Mariani, C.P. Heinzman, J.P. Agrios and S.B. Cohn. "Slot Line Characteristics." 1969 Transactions on Microwave Theory and Techniques 17.12 (Dec. 1969 [T-MTT]): 1091-1096.

The slot line, a novel transmission line suitable for application to microwave integrated circuits, may be used in place of or in association with microstrip. This paper presents experimental and theoretical data concerning slot line wavelength, characteristic impedance, transitions, and tolerances. The measurements have been conducted at S band using different dielectric constant materials. Experimental results indicate that the slot wavelength /spl lambda/ agrees with theory to within 2 percent, whereas the characteristic impedance of the slot line was measured to be about 30 percent less than the theoretical value. Tolerances associated with the theoretical slot line parameters were not found to be critical.

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