

Abstracts

An Equivalent Circuit Model for Terminated Hybrid-Mode Multiconductor Transmission Lines

L. Carin and K.J. Webb. "An Equivalent Circuit Model for Terminated Hybrid-Mode Multiconductor Transmission Lines." 1989 Transactions on Microwave Theory and Techniques 37.11 (Nov. 1989 [T-MTT]): 1784-1793.

An equivalent circuit for terminated hybrid-mode multiconductor transmission lines is presented. Existing CAD packages, such as SPICE, can be used for its implementation. Model parameters can be found from either a TEM or a full-wave analysis of the transmission lines. The equivalent circuit is used to simulate multiconductor microstrip for applications in high-speed integrated circuits. An examination of the validity of the TEM approximation for example cases is carried out in the time and frequency domains.

[Return to main document.](#)