Abstracts

Multimode TRL. A new concept in microwave measurements: theory and experimental verification

C. Seguinot, P. Kennis, J.-F. Legier, F. Huret, E. Paleczny and L. Hayden. "Multimode TRL. A new concept in microwave measurements: theory and experimental verification." 1998 Transactions on Microwave Theory and Techniques 46.5 (May 1998, Part I [T-MTT]): 536-542.

An original multimode thru-reflection line (TRL) algorithm is used to derive the generalized scattering parameters of multimode two-port networks. Theoretical developments are detailed for calibration procedures based on two ports as well as multiple-port vector network analyzer (VNA) measurements. First-run experimental results demonstrate the validity of this technique. This method allows the experimental characterization of multiconductor transmission-line devices. It could also be used to characterize power coupling to undesired modes in monolithic microwave integrated circuit (MMIC) structures using conductor-backed coplanar waveguides.

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