# Abstracts

## Characterization of Packaged Microwave Diodes in Reduced-Height Waveguide

*J.M. Roe and F.J. Rosenbaum. "Characterization of Packaged Microwave Diodes in Reduced-Height Waveguide." 1970 Transactions on Microwave Theory and Techniques 18.9 (Sep. 1970 [T-MTT]): 638-642.*

A technique for the measurement of package parasitic and equivalent-circuit parameters of microwave semiconductor devices at the frequency of operation is presented. In this method a two-port coupling circuit is found which transforms the impedance measured in rectangular waveguide to the terminals of the equivalent circuit used to represent the semiconductor device. This approach combines known properties of radial transmission lines and of impedance measurement in the TE/sub 10/-mode full-height waveguide to obtain an analytical referencing technique for a diode mounted across a reduced-height waveguide. Application of this technique is illustrated by measurements of several varactor diodes.

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