Abstracts

An Analysis of the "Quarter-Wave" Technique of Reducing the Errors in UHF and Microwave Impedance Measurement

W.E. Little, D.A. Ellerbruch and G.F. Engen. "An Analysis of the "Quarter-Wave" Technique of Reducing the Errors in UHF and Microwave Impedance Measurement." 1967 Transactions on Microwave Theory and Techniques 15.9 (Sep. 1967 [T-MTT]): 504-507.

An analysis is given of the "quarter-wave" impedance measurement technique. This technique, which finds its widest potential application in conjunction with standing wave machines, permits the approximate elimination of the error due to residual reflection or VSWR. If the other sources of error are small, the potential reduction in error is in the ratio |t/sub 11|/2|S/sub 11/|, where S/sub 11/ and t/sub 11/ are the residual reflection coefficients of the standing wave machine and quarter-wavelength section, respectively.

❑ Return to main document.