

Abstracts

An Automatic Microwave Dielectrometer (Correspondence)

W.F. Gabriel. "An Automatic Microwave Dielectrometer (Correspondence)." 1959 Transactions on Microwave Theory and Techniques 7.4 (Oct. 1959 [T-MTT]): 481-481.

The dielectric constant of low-loss dielectric materials can be measured accurately, rapidly, and automatically by proper utilization of an automatic microwave impedance instrument of the type which presents its output in Smith Chart form; i.e., the magnitude and phase of the reflection coefficient. The method employed is essentially a modification of the slotted line technique which was originally described by Roberts and Von Hippel, the difference being that the slotted line is replaced by an automatic impedance instrument with a direct reading scale.

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