# Abstracts

## L-Band Variable-Delay-Time YIG-YAG-YIG and YAG-YIG-YAG Delay Lines

*A.B. Smith. "L-Band Variable-Delay-Time YIG-YAG-YIG and YAG-YIG-YAG Delay Lines." 1969 Transactions on Microwave Theory and Techniques 17.11 (Nov. 1969 [T-MTT] (Special Issue on Microwave Acoustics)): 997-1001.*

Two types of YIG variable-delay-time microwave delay lines are described. These are the YIG-YAG-YIG and YAG-YIG-YAG configurations, both of which provide /spl sim/2 μs of variable delay in L-band. Two-port operation is achieved in both of these devices with leakage of the undelayed pulse between input and output being attenuated more than 100 dB. These are completely self-contained devices with internal permanent magnets and terminals for connecting a control signal to vary the delay time. Insertion loss, bandwidth, and VSWR data are presented as well as curves showing delay variation with control current. A comparison of these two types of delay lines is also presented, pointing out the advantages and disadvantages of each type.

❑ Return to main document.