Abstracts

K-Band Reciprocal Ferrite Phase Modulator (Correspondence)

F. Reggia. "K-Band Reciprocal Ferrite Phase Modulator (Correspondence)." 1961 Transactions on Microwave Theory and Techniques 9.3 (May 1961 [T-MTT]): 269-270.

A rectangular waveguide reciprocal phase modulator, making use of a longitudinal magnetic control field, was reported by Reggia and Spencer in 1957. This X-band phase modulator consisted of a longitudinally magnetized ferrite rod centrally located inside a rectangular wavegrride excited in its fundamental TE/sub 01/ mode. The outstanding advantages of this type modulator are the large phase shifts per unit length obtainable, simple geometric configuration, the high figure of merit possible, and the small magnetic control fields required. These modulators have since been designed for use at frequencies ranging from 3000 Mc to 70,000 Mc.

❑ Return to main document.