# Abstracts

## A High-Power UHF Circulator

*Y. Konishi. "A High-Power UHF Circulator." 1967 Transactions on Microwave Theory and Techniques 15.12 (Dec. 1967 [T-MTT]): 700-708.*

The insertion loss, the bandwidth ratio, and the nonlinearity of a high-power UHF circulator are discussed generally with regard to the characteristics, volume, and filling factor of the ferrite. Theory and experiment are made on the high-power circulator with ferrite, where either surface of the ferrite comes into contact with air. A wideband technique in improving the narrowband that is essentially the result of the filling factor of ferrite is also described. To avoid the center conductor heating effect, a circulator without a center conductor is described. Experiments have proven that, for ferrite nonlinearity, the threshold power by spinwave occurs in a polycrystal for CW power even above resonance and is changed by a external field strength, whereas the nonlinearity is not observed in a single crystal.

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