

# Abstracts

## Techniques for Broad-Banding Above Resonance Circulator Junctions without the Use of External Matching Networks

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G.P. Riblet. "Techniques for Broad-Banding Above Resonance Circulator Junctions without the Use of External Matching Networks." 1980 Transactions on Microwave Theory and Techniques 28.2 (Feb. 1980 [T-MTT]): 125-129.

By using a modification of Bosma's approach, a theoretical explanation is given for the broad-banding effect which can be achieved by the use of three open-circuited stubs on the center conductor circumference of above resonance circulators. It is also shown that similar broad-banding can be achieved by the use of materials with very large values of  $4\pi M/\text{sub s/}$  in the above resonance state. It appears that the frequency dependence of the conductance  $G(\omega)$  is a limiting factor in the bandwidth improvements that can be obtained in these ways.

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