

Multiple-Frequency Operation of Y-Junction Circulators Using Single-Mode Approximation

E.R.B. Hansson and K.G. Filipsson. "Multiple-Frequency Operation of Y-Junction Circulators Using Single-Mode Approximation." 1979 Transactions on Microwave Theory and Techniques 27.4 (Apr. 1979 [T-MTT]): 322-328.

The conditions for a Y-junction circulator to operate within more than one frequency band are studied. By taking into account only the dominant resonance mode at each circulation frequency, explicit expressions are obtained which define the properties of the circulator. The results are presented in diagrams and tables which enable rapid evaluation of obtainable performance for some of the most important mode combinations. The validity of the results are experimentally verified.

 [Return to main document.](#)