

Abstracts

A Y-Junction Strip-Line Circulator

U. Milano, J.H. Saunders and L. Davis, Jr.. "A Y-Junction Strip-Line Circulator." 1960 Transactions on Microwave Theory and Techniques 8.3 (May 1960 [T-MTT]): 346-351.

The theoretical approach to the three-port symmetrical circulator is reviewed and presented in a form valid for the most general waveguide case. A strip-line Y-junction circulator is described and the performance of different units in the band 800-1600 mc is illustrated. The new type of device described offers, for the low-frequency region of the microwave spectrum, advantages of simple design, light weight, and great compactness with respect to the classical types. When operated with a permanent magnet it gives--in a bandwidth of about 4 per cent--isolation greater than 20 db, insertion loss ≤ 0.4 db, and input VSWR ≤ 1.20 .

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