Abstracts

A High Power, Y Junction, E-Plane Circulator

J.W. McGowan and W.H. Wright, Jr.. "A High Power, Y Junction, E-Plane Circulator." 1967 G-MTT International Microwave Symposium Program and Digest 67.1 (1967 [MWSYM]): 85-87.

The need for a small, lightweight, high-power circulator for duplexer operatian at 9375 MHz has led to the development of a symmetrical E plane, Y junction circulator capable of handling in excess of ½ MW peak and 650W average power. This does not represent the ultimate, however, since equipment limitations allow tests only up to these powers. The circulator will perform adequately in the frequency range of 9.0 to 9.6 GHz. Figure 1 is a plot of insertion loss as a function of frequency at low power levels. A resonant absorption peak appeared in the frequency range; however, this peak can be moved from one frequency to another with only a slight field adjustment.

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