

Abstracts

Analysis of Lossy Symmetrical Three-Port Networks with Circulator Properties

S. Hagelin. "Analysis of Lossy Symmetrical Three-Port Networks with Circulator Properties." 1969 *Transactions on Microwave Theory and Techniques* 17.6 (Jun. 1969 [T-MTT]): 328-333.

The properties of three-port networks have been widely discussed in connection with circulator development. However, much attention has not been paid to the influence of loss on network properties. The purpose of this paper is to analyze the relations between the scattering coefficients in a lossy rotation-symmetrical three-port network. The results are presented in several curves showing the realizable combinations of scattering coefficients for different states of loss. Special consideration given to networks with circulator properties.

 [Return to main document.](#)