Abstracts

Broadband Matching of Resonant Circuits and Circulators

E. Schwartz. "Broadband Matching of Resonant Circuits and Circulators." 1968 Transactions on Microwave Theory and Techniques 16.3 (Mar. 1968 [T-MTT]): 158-165.

In the first part of this paper a broadband matching theory of resonant circuits is developed. It is not assumed that the center frequency of the matching interval is equal to the resonance frequency of the resonant circuit. The upper limits of optimum broadband matching are derived with the aid of Fano's integrals. Furthermore it is shown how we can approach these ripper limits as well as desired with real matching two-ports with Chebyshev response. This broadband matching theory of resonant circuits may be applied to circulators if the input impedances of the circulators can he represented approximately by resonant circuits. This problem is treated in the second part of the paper.

❑ Return to main document.