

Abstracts

Notes on a Crystal Mixer Performance

W.L. Pritchard. "Notes on a Crystal Mixer Performance." 1955 Transactions on Microwave Theory and Techniques 3.1 (Jan. 1955 [T-MTT]): 37-39.

A simple relation between optimum rf source impedance for minimum noise figure and the nominal conversion loss of a mixer is derived. This impedance is related to the input mismatch and its dependence on the type of IF amplifier input circuit is discussed. Relations between the crystal noise temperature and mixer noise temperature as a function of conversion loss are derived for different load conditions at the image frequency terminals.

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