

Abstracts

Scattering Matrix Description of Microwave Resonators (Short Papers)

B.A. Galwas. "Scattering Matrix Description of Microwave Resonators (Short Papers)." 1983 Transactions on Microwave Theory and Techniques 31.8 (Aug. 1983 [T-MTT]): 669-671.

In this paper an analysis of the scattering matrix coefficients (reflectance and transmittances) of the microwave resonators is presented. Two general cases of resonator couplings are considered. One of them is a multiport with one port terminated by the resonator, the other is a resonator coupled, in various ways, to a number of transmission lines. The effect of external circuits on the Q and resonant frequency of the resonator has also been examined. Fundamental parameters for the commonly used microwave resonator couplings are shown in Table L

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