Abstracts

Properties of Shielded Cylindrical Quasi-TE/sub 0nm/-Mode Dielectric Resonators (Short Papers)

J. Krupka. "Properties of Shielded Cylindrical Quasi-TE/sub 0nm/-Mode Dielectric Resonators (Short Papers)." 1988 Transactions on Microwave Theory and Techniques 36.4 (Apr. 1988 [T-MTT]): 774-779.

Comparison of the Rayleigh-Ritz method and the mode-matching method for computations of quasi-TE/sub 0nm/-mode frequencies and unloaded Q factors of shielded dielectric resonators is presented. Rigorous bounds for the true quasi-TE/sub 0nm/-mode frequencies are assessed. Influence of various parameters on the resonant frequencies, unloaded Q factors, and the temperature coefficients of the resonant frequency is demonstrated for many shielded dielectric resonator structures. Different approaches to unloaded Q factor computations are discussed and numerically compared.

❑ Return to main document.