Abstracts

The Influence of the Energy Dissipation and of the Geometry on Toroidal Resonators with a Conducting Separating Wall

R. Deutsch. "The Influence of the Energy Dissipation and of the Geometry on Toroidal Resonators with a Conducting Separating Wall." 1980 Transactions on Microwave Theory and Techniques 28.9 (Sep. 1980 [T-MTT]): 1014-1017.

An exact solution of the Maxwell equations for the stationary electomagnetic wave in a toroidal resonator with a separating wall is obtained. The structure of the fields in the resonator and in the metallic toroidal wall is described analytically. The dispersion relation is formulated and the eigenfrequencies, the damping rate and the Q factor of the resonator are calculated.

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