

Abstracts

Coupling of a planar waveguide and a dielectric disk [laser resonator]

R.S. Dehmubed and P. Diament. "Coupling of a planar waveguide and a dielectric disk [laser resonator]." 1998 Transactions on Microwave Theory and Techniques 46.10 (Oct. 1998, Part I [T-MTT]): 1461-1470.

The complete analytic solution to the problem of coupling between a slab waveguide and a ring has been derived. The two-configuration problem is reduced to two simultaneous single-configuration problems by the method of equivalence. These are independently solved to yield the exact solution in terms of modal content. The results are illustrated with a numerical example and corroborated independently by a variational approach.

 [Return to main document.](#)