Abstracts

An Extension to the High Loss Region of the Solution of the Confocal Fabry-Perot Resonator Integral Equation (Correspondence)

K.E. Lonngren and J.B. Beyer. "An Extension to the High Loss Region of the Solution of the Confocal Fabry-Perot Resonator Integral Equation (Correspondence)." 1965 Transactions on Microwave Theory and Techniques 13.2 (Mar. 1965 [T-MTT]): 243-244.

Recently two papers have appeared that relate the fields in confocal Fabry-Perot resonators to oblate spheroidal coordinates. Zimmerer states ". . . the spheroidal surfaces within the resonator are surfaces of constant phase and the hyperboloids are surfaces of constant amplitude." Vainshtein shows that starting from an oblate spheroidal resonator and assuming that the propagation is directed largely along the z axis (see Fig. 1), one can determine the amplitude distribution along a resonator plate. The result he obtained agrees very well with that obtained previously by Goubau and Schwering who derived this result more directly from Maxwell's equations.

❑ Return to main document.