# Abstracts

## Tables of Normalized Cutoff Wavenumbers of Elliptic Cross Section Resonators

*F.A. Alhargan and S.R. Judah. "Tables of Normalized Cutoff Wavenumbers of Elliptic Cross Section Resonators." 1994 Transactions on Microwave Theory and Techniques 42.2 (Feb. 1994 [T-MTT]): 333-338.*

Current methods to evaluate the mode resonance of elliptic cross section resonators are cumbersome for design purposes. In this paper, tables for the cutoff wavenumbers of TE/sub nm/ and TM/sub nm/ modes for both even and odd modes are tabulated in a new way, that reveals a simple relation to the equivalent circular cross section resonator and makes interpolation results accurate. These tables range for n = 0, … ,3 for even modes and n= 1,… ,4 for odd modes, with m = 1,…,5 for both. The tables cover 80 different modes for eccentricity in the range 0<= e<=0.99. Asymptotic formulae are given for higher modes and approximate formulae are given for small eccentricity 0<= e <= 0.2. The accuracy of interpolation, approximate formulae and asymptotic formulae are compared with published results.

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