

## Geometrical Effects in Gyrotron Coaxial Cavities: Application to Mode Selection (Short Papers)

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*J.J. Barroso, P.J. Castro and R.A. Correa. "Geometrical Effects in Gyrotron Coaxial Cavities: Application to Mode Selection (Short Papers)." 1995 Transactions on Microwave Theory and Techniques 43.6 (Jun. 1995 [T-MTT]): 1384-1386.*

A study of the electrodynamical properties of gyrotron coaxial cavities using a conical inner rod has been conducted and compared with cold-test measurements on TE modes over the frequency range 11-14 GHz. On the basis of a geometrical design criterion for resonance of the normal modes, it has been demonstrated that the mode spectrum associated with a purpose-built test coaxial cavity is significantly less dense than that for the empty cavity without the coaxial insert.

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