

标题: Analysis of Aftercavity Interaction in European ITER Gyrotrons and in the Compact Sub-THz Gyrotron FU CW-CI

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摘要: Possibilities of arising of aftercavity interaction are analyzed in the ITER 170 GHz 2 MW coaxial cavity gyrotron and the 170 GHz 1 MW cylindrical cavity gyrotron, as well as in the compact 394.5 GHz low power gyrotron FU CW-CI. Also, the simulations for the gyrotron efficiency in the presence of aftercavity interaction are performed in the cold cavity approximation. Results of the analysis illustrate the subtle interplay between the geometry of the output taper and the profile of the magnetic field.

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