Abstracts

Stability of grid amplifiers

Cheh-Ming Liu, M.P. De Lisio, A. Moussessian and D.B. Rutledge. "Stability of grid amplifiers." 1998 Transactions on Microwave Theory and Techniques 46.6 (Jun. 1998 [T-MTT]): 769-774.

We present a stability model for quasi-optical grid amplifiers. This model is useful for predicting and suppressing the common-mode oscillations that often occur in amplifier grids. Three stabilization techniques will be discussed. The first technique uses a capacitor to stabilize the grid. The second approach employs resistance to suppress the oscillations. The final technique stabilizes the grid by reducing the on-chip common-mode resistance, allowing greatly increased amplifier efficiencies. Experimental evidence will be presented to confirm the validity of our stability model.

❑ Return to main document.