

Abstracts

A deterministic approach for designing conditionally stable amplifiers (Comments and Authors' Reply)

L.L. Babak, M.L. Edwards, Sheng Cheng and J.H. Sinsky. "A deterministic approach for designing conditionally stable amplifiers (Comments and Authors' Reply)." 1999 Transactions on Microwave Theory and Techniques 47.2 (Feb. 1999 [T-MTT]): 250-251.

For original paper see M.L. Edwards et al., *ibid.*, vol.43, no.7, pp.1567-75 (July 1995). In the above paper, the authors presented a careful analysis of single-sided matched conditionally stable amplifiers. In particular, they determined a maximum single-sided matched gain G_{msm} which is reached for passive jointly stable source (load) terminations $G_{msm} = 2kG_{ms}$ where k is the Rollett's stability factor and $G_{ms} = |S_{21}/S_{12}|$ is the maximum stable gain of device. However, at least some of the results presented in the above paper can be found in other literature. In this paper, I would like to outline the formerly published papers treating conditionally stable amplifiers in terms of the scattering parameters. A reply by the original authors is included.

 [Return to main document.](#)