Abstracts

Improving amplifier stability through resistive loading below the operating frequency

Sun-Wook Kim, Ik-soo Chang, Woo-Tae Kang and In-Pyo Kyung. "Improving amplifier stability through resistive loading below the operating frequency." 1999 Transactions on Microwave Theory and Techniques 47.3 (Mar. 1999 [T-MTT]): 359-362.

A new design method for a stable RF amplifier using a broadband-matched 3-dB coupled line is proposed in this paper. The proposed broad-band matching circuit consists of lossless matching circuits at operating frequency band and resistive matching circuits at frequencies below the operating band. This design method improves the stability of the amplifier and is suitable for the design of a power amplifier and multistage amplifier. When applying this proposed method to a design of a two-stage power amplifier for personal communication systems, measured results show 18.0dB gain and 9 W (39.5 dBm) output power.

❑ Return to main document.