Abstracts

Extraction of Microwave Noise Parameters of FET Devices

F. Colombani and E. Camargo. "Extraction of Microwave Noise Parameters of FET Devices." 1990 MTT-S International Microwave Symposium Digest 90.1 (1990 Vol. I [MWSYM]): 439-442.

A technique is proposed for the extraction of the noise parameters of on-wafer, chip-mounted or packaged MESFETs and HEMTs. The approach includes the characterization of the device's small-signal equivalent circuit employing DC and RF measurements. A few microwave noise measurements are associated with computer fitting procedures to determine the noise coefficients P, R and C which completes the method. The procedure is used to determine the optimum source impedance of a Toshiba S8818A 0.3 µm gate length MESFET and the obtained parameters are compared with experimental results.

❑ Return to main document.