Abstracts

Small-Signal Modeling of High Power HBTs Using the Scaling Approach

R. Hajji, F.M. Ghannouchi and A.B. Kouki. "Small-Signal Modeling of High Power HBTs Using the Scaling Approach." 1994 MTT-S International Microwave Symposium Digest 94.2 (1994 Vol. II [MWSYM]): 1249-1252.

A systematic scaling approach for the modeling of high-power/large-size HBTs is presented. The measured S-parameters of a three elementary-cell HBT are compared to those obtained with the scaled model and the commonly used lumped equivalent circuit model. It is shown that a better fit to the measured S parameters is obtained when the scaled model is used. The interconnections and parasitics between elementary cells are accounted for based on the actual footprint of the device.

❑ Return to main document.