

Abstracts

An accurately scaled small-signal model for interdigitated power P-HEMT up to 50 GHz

Shen-Whan Chen, O. Aina, Weiqi Li, L. Phelps and T. Lee. "An accurately scaled small-signal model for interdigitated power P-HEMT up to 50 GHz." 1997 Transactions on Microwave Theory and Techniques 45.5 (May 1997, Part I [T-MTT]): 700-703.

In this paper, the authors report an approach for constructing scalable small-signal models for interdigitated power pseudomorphic high-electron-mobility transistors (P-HEMTs). By using cold-FET and Yang-Long measurement, as well as direct extraction procedures, scaling rules for extrinsic components were established that allow accurate models over a broad frequency range. These models have been used to design ultrawide-band monolithic microwave integrated circuits (MMICs) up to 50 GHz.

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