Electrical and thermal characterization of single and multi-finger InP DHBTs - DTU Orbit

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This paper presents the characterization of single and multi-finger Indium Phosphide Double Heterojunction Bipolar transistors (InP DHBTs). It is used as the starting point for technology optimization. Safe Operating Area (SOA) and small signal AC parameters are investigated along with thermal characteristics. The results are presented comparing different device dimensions and number of fingers. This work gives directions towards further optimization of geometrical parameters and reduction of thermal effects.

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