

## Electrothermal simulation of HBT by TLM method with quasi two dimensional model

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Presents an improved quasi two dimensional model incorporating depletion-layer approximation to simulate electrothermal properties of HBT. In the model the temperature profile and minority carrier distributions are numerically simulated by transmission line matrix (TLM) method. The results show that this model can conveniently simulate the electrothermal effects under the efficient reduction both in CPU time and memory space.

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