

GaN Power FET 모델링에 관한 연구

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Study on Modeling of GaN Power FET

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Abstract : In this paper, we proposed GaN trench Static Induction Transistor(SIT). Because The compound semiconductor had superior thermal characteristics, GaN and SiC power devices is next generation power semiconductor devices. We carried out modeling of GaN SIT with 2-D device and process simulator. As a result of modeling, we obtained 340V breakdown voltage. The channel thickness was 3um and the channel doping concentration is $1e17cm^{-3}$. And we carried out thermal characteristics, too.

Key Words : Static Induction Transistor, GaN, Epi layer, High Voltage, Power Devices

감사의 글

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