



## Extraction of RDS(ON) of n-Channel Power MOSFET by Numerical Simulation Model

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In this paper we present an original method for n-channel power MOSFET resistance extraction in the operation mode (RDS(ON)). The  $I_{DS}=f(V_{DS})$  electrical characteristics measurements for the transistor and the Body-Drain junction are realized for the experimental determination and the extraction (by numerical analysis) of RDS(ON), respectively. Values of this resistance are extracted for different positive bias applied between the gate and the source (+VGS). Physical parameters obtained from the numerical analysis are inspected, and results show that the numerically analysed junction characteristic is in very good correlation with the electrical measurement.

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