Abstracts

Ill conditioning in self-heating FET models (Comments)

A.E. Parker. "Ill conditioning in self-heating FET models (Comments)." 2002 Microwave and Wireless Components Letters 12.9 (Sep. 2002 [MWCL]): 351-352.

A recent letter by S. A. Maas (see ibid., vol.12, no.3, p.88-9, March 2002) reported ill conditioning in nonlinear circuit simulators caused by the introduction of self-heating effects into FET models. This is true for circumstances outlined in that work but is a consequence of using an incomplete thermal model. This letter points out that an account for both thermal potential and mobility variation with temperature will eliminate the problem.

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