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Aspecte fiabiliste ale amplificatoarelor RF cu zgomot redus

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Abstract

pHEMTs have become the technology of choice for current system requirements. A key requirement for all systems is high reliability components which do not fail or degrade in performance during the life cycle of the product. The paper takes a fresh look at lessons learned and where things stand today. The mobile telecommunication industry is currently at a much more vulnerable position than it appears. A full understanding of the physics and statistics of the defect generation is required to investigate the ultimate reliability limitations for amplification with reduced noise.

Keywords: pHEMT, CMOS, BiCMOS, skin effect, amplification with reduced noise, substrate losses, reliability tests.