- **Beat incredulity**: very often the results of a theoretical description made with doubtful approximated assumptions are unconvincing. The outcome seems too simple, not general enough or maybe simply unbelievable.
- Understand limits of approximation: the simple models used for hand calculations are often too approximate and can generate misleading results. Nevertheless, simple equations and simplified rules are keys for directing the designer's activity.
- Reinforce knowledge: this is a general beneficial effect of using examples and computer simulations. For electronics, since often knowledge is not codified by reliable equations or reasonable rules, using examples and computer verifications is particularly helpful.
- **Learn rules of thumb**: the use of rules of thumb is very common in expert designers' activity; with examples and simulations it is possible to accumulate knowledge that is codified in a set of rules of thumb.