

## ESD protection of RF circuits in standard CMOS process (2002 Vol. I [MWSYM])

---

*K. Higashi, A.O. Adan, M. Fukumi, N. Tanba, T. Yoshimasu and M. Hayashi. "ESD protection of RF circuits in standard CMOS process (2002 Vol. I [MWSYM])." 2002 MTT-S International Microwave Symposium Digest 02.1 (2002 Vol. I [MWSYM]): 31-34 vol. 1.*

The tradeoffs in the ESD protection device for RFCMOS circuits are described, and the characteristics of an SCR-based ESD structure are presented. The parasitic capacitance of the ESD structure is reduced to  $\sim 150$  fF. RV HBM and 750 V CDM are achieved in a LNA working at 2.5 GHz with NF<4 dB, applicable for Bluetooth wireless transceiver.

 [Return to main document.](#)