

Abstracts

Multi-megawatt X-band semiconductor microwave switches

F. Tamura and S.G. Tantawi. "Multi-megawatt X-band semiconductor microwave switches." 2000 MTT-S International Microwave Symposium Digest 00.3 (2000 Vol. III [MWSYM]): 1731-1734.

We present the concepts for high power semiconductor RF switches, designed to handle 100 MW-order signal at X-band. Also we describe an abstract design methodology, and derive a general scaling law for these switches. The design and experimental study of a switch operating at TE₀₁₁ mode in over-moded circular waveguides is discussed. The switch is composed of array of tee junction elements that have a PIN/NIP diode array window in the third arm.

[Return to main document.](#)