

Abstracts

A High-Power X-Band Diode Amplifier

R.J. Pankow and R.G. Mastroianni. "A High-Power X-Band Diode Amplifier." 1980 MTT-S International Microwave Symposium Digest 80.1 (1980 [MWSYM]): 159-161.

The requirement for high power solid state amplifiers at X-Band has necessitated a close investigation of diode power combiners for use as reflection amplifiers. A brassboard amplifier incorporating 17 diodes in all and using a 10 diode TM₀₁₀ mode resonant cavity combiner has been fabricated in a 4 inch diameter 10 inch long cylindrical configuration. A power level of 74 watts peak at a 0.33 duty ratio and 34 dB gain has been achieved.

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