MOSFET RF Power Amplifier for Accelerator Applications*, J.-M. GODEFROY, J. POLIAN, F. RIBEIRO, T. RUAN, LURE - An inexpensive reliable 500 MHz 1 kW CW MOSFET solid state linear amplifier has been developed for accelerator applications. It presents the following advantages: each 150 W module is protected by a surface mount circulator and is equipped with input and output trimmer capacitors to assure perfect matching, equal gain and high efficiency; only two pieces of simple 1X8 impedance transformer are used for RF power distribution and combination. Based on this modular amplifier, low cost, very high power solid state amplifiers may easily be developed.

* Work supported by CNRS-CEA-MENRT.