

A New High Power Klystron for the SLAC B-Factory, E. DEMMEL, S. LÜTGERT, Philips RHW, Hamburg, FRG - A new klystron for driving the SLAC B-Factory is currently under development at Philips. Detailed numerical analysis has been carried out in order to meet all the requirements. Particular attention is paid to the bandwidth and phase behaviour of the tube because the upper limit in group delay is given by the control system of the B-Factory. Although bandwidth and efficiency are competing demands - not easily met by the same design - the simulation predicts very high efficiency. Another important aspect which is being taken into account for the design is operational stability of the tube. The design concept and numerical as well as measurement results will be presented.