

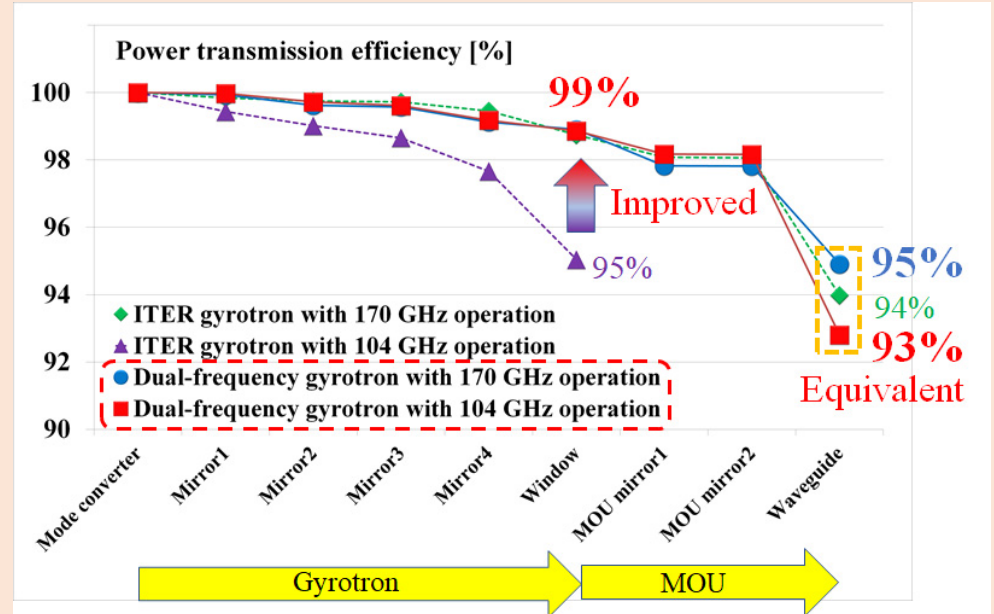
[P3-1406] Progress on performance tests of ITER-gyrotrons and design of dual-frequency gyrotron for ITER staged operation plan

Presented by R. Ikeda (QST)

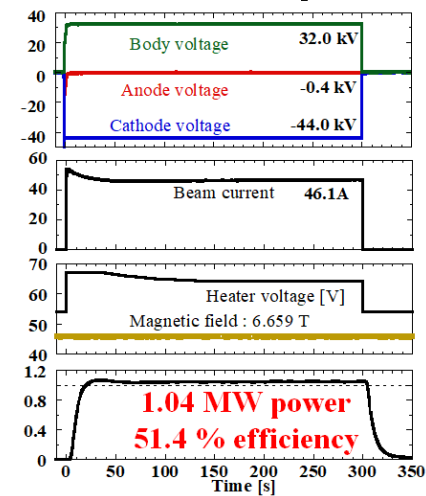
Japan ITER-gyrotrons



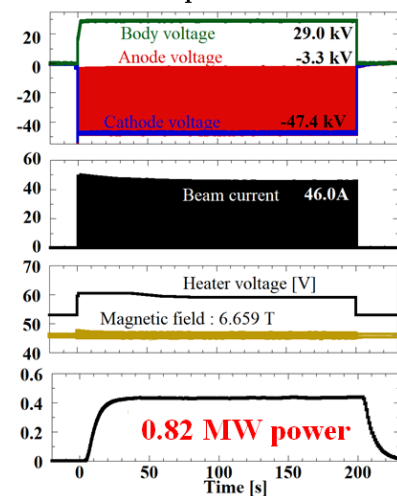
Design of 170GHz/104GHz gyrotron



(a) Continuous-wave operation



(b) 5 kHz full-power modulation



- Manufacturing of all sets of Japan ITER-gyrotrons (8 sets) was completed. The 4 gyrotrons have completed the performance tests (170 GHz frequency, 1 MW power and 50 % efficiency, 5 kHz modulation) and are being prepared for delivery to ITER for First Plasma.
- Design optimization for dual-frequency 170 GHz and 104 GHz (for 1.8 T operations) gyrotron was completed and the power transmission efficiency in the gyrotron and the MOU equivalent to that of the ITER gyrotron was achieved.