SOFT 2018



Contribution ID: 1071 Type: not specified

P3.024 Anode power supply for the electron cyclotron resonacne heating system on J-TEXT tokamak

Wednesday, 19 September 2018 11:00 (2 hours)

Based on the Gycom gyrotron of a diode type with a single-stage depressed collector, a 105GHz/500kW/1s electron cyclotron resonrance heating sytem is being developed on J-TEXT tokamak. To modulate output power of the gyrotron, we designed a 33kV/1A anode power supply based on the pulse step modulation technology. The power supply consists of 40 modules with output voltage of 800 V and 10 modules with output voltage of 100 V. In this way, the output voltage of the anode power supply can be adjusted accurately without pulse width modulation. We tested the andoe power supply with a dummy load. The test results indicated that the designed power supply can meet requirements of the ECRH system on J-TEXT.

Presenter: JIN, Yikun (International Joint Research Laboratory of Magnetic Confinement Fusion and Plasma Physics Huazhong University of Science and Technology)

Session Classification: P3