

New ideas on klystron efficiency

Commercial Prototype of High Efficiency S-band Pulsed BAC MBK

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¹JSC "Vacuum device's basic technologies", Moscow, 117342, Vvedetskogo str.,33,.1

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"To minimise the development risks and fabrication cost of the first BAC MBK prototype, we have decided to facilitate a retrofit design of an existing klystron; MBK KIU-147. It has been in production in Russia (FSUE "Toriy") for almost 15 years and operates at 60 kV, 290 A with 42% RF power production efficiency."





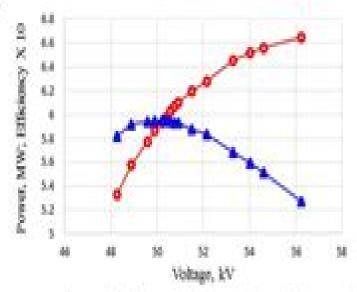


Figure 5: The efficiency (triangular) and RF power production (circle) in saturation at 3.003 GHz as functions of high voltage.

LCWS2017, Still

Walter Wuensch, CERN

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