

## 6410A-ET - High-Power S-Band Magnetron



Almost certainly RK-6410/QK338 was one of the most powerful packaged magnetrons ever made, designed by Raytheon for early warning radars. ET-6410 is the exact equivalent of the RK-6410, made by EITel, the Italian tube manufacturer which, under the name of Elettronica Sicula, ELSI, in the fifties had been founded and then fully qualified by Raytheon itself.

Magnetron measures about 546 x 406 x 190 mm. Net weight is about 26.3 kg. Integral magnet, 3" waveguide flange. Intended to operate with forced-liquid cooling, pressurized output windows and cathode bushing immersed in oil.

Preheating heater current 85 A for 3 minutes minimum, must be reduced to 82 A in operation. Voltage at 85 A from 7.3 to 9.3 V.

Typical operation, 71 kV at 130 A input pulses. Output pulses 4.8 MW peak, 2  $\mu$ s at 0.00072 duty. 2750 to 2860 MHz.

Data can be found in the RMA record [1575](#). Test data and cover of the warranty for the sample in the photos above can be read [here](#).

The sample was unused, still in its original shipping crate weighting about 60 kg. The tube complies with NSN spec 5960-00-812-9980.

A movie showing the use of this magnetron can be watched at the link below:

<https://www.youtube.com/watch?v=4NeJdH1Q5Cw>