5J26 – L-Band Tunable Magnetron

Mechanically tunable magnetron which covers the L-band from 1220 to 1350 MHz. It repalaces a whole family of fixed frequency types, from **4J21 to 4J30**. Above, in the last photo the magnetron is showed with its protective boot removed.

Tunable magnetrons were mainly introduced to easily prevent interferences between different combat units fitted with the same radar sets and even to reduce the inventory of spare parts. In this model which directly replaces ten fixed types the tuning is accomplished by two concentric rings moving up and down into the strap channels in the anode block. The description of this magnetron from its origin to its design solutions is in the **attached document** from Bell System Technical Journal.

External magnet, coaxial output suitable for 1-5/8” coaxial line. 8 slot-type resonators. Forced-air cooling required.

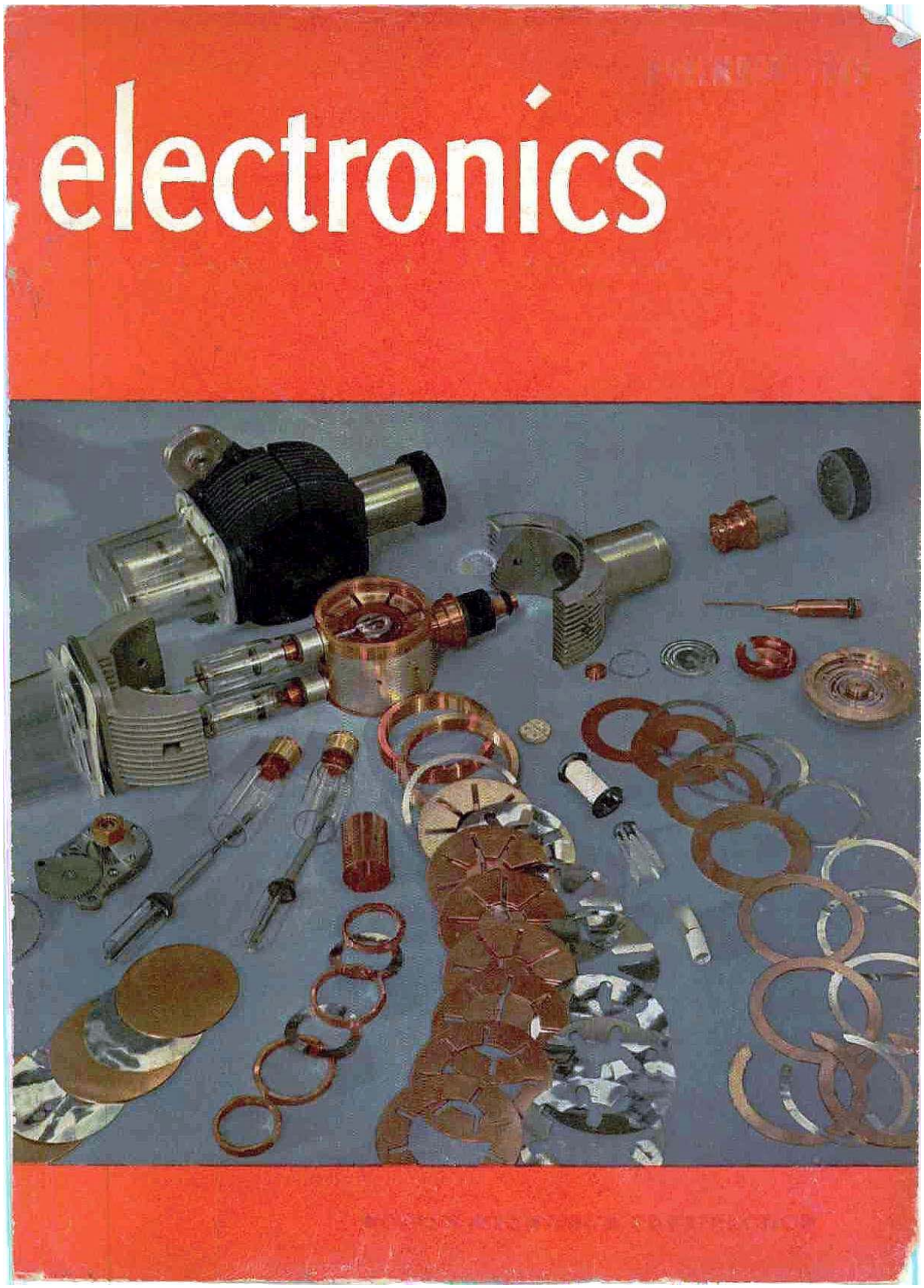
317 mm lenght, 9,00 kg weight.

Indirect heating, 23.5 volts at 2.2 amps heater. Heater voltage must be reduced to 15.5 volts after the application of high voltage.

31 kV at 60 A peak input pulse. 600 kW typical output peak power.

Registered to Western Electric only in October 1948, having been reserved since March 1945, during the war. RMA release **703**.

One of most successful designs with many applications and countless sources, both in US and in Europe. The sample in the photos was manufactured by Amperex.



The many parts necessary to build the 5J26 magnetron gained the front cover in the November 1949 Electronis magazine.