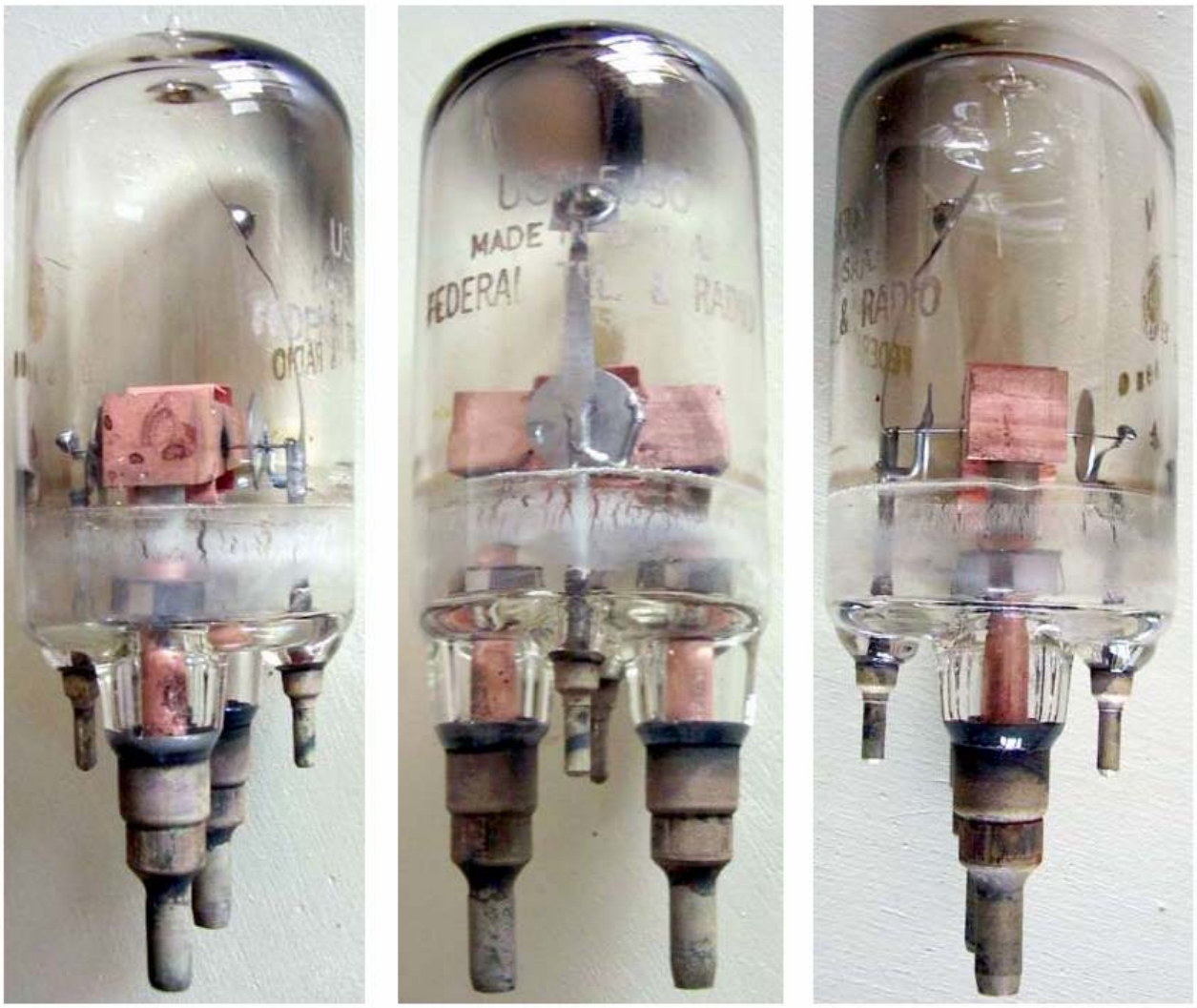
5J30 – Magnetron, Split Anode

Photos of a General Electric GL-5J30. This magnetron was classified as 'Confidential', as etched on the glass.



5J30 was also manufactured by Federal Telephone & Radio Corp. (ITT), Newark, N.J.

External magnet, split-anode, glass body magnetron. 150 to 385MHz, 75 to 150W CW out. Water-cooled through coaxial tubing in the anode pins. Protective copper baffles were added on anode blocks to prevent glass melting due to electron bombardment. Other protective shields were placed at the extremes of the cathode filament and protective rings are also visible around the copper tubing connecting anode segments to outside through glass seals. Rings prevented high energy electrons spiraling around copper tubes to reach glass and melt it. Average life of these tubes was in the order of 30 hours.

1500 gauss flux density, 450mA max at 2500V. 2.2V at 30A filament.

1946 RMA registration, even if the tube had been in production roughly since 1944 as ZP590. Intended for use in radar jammers at variable power, pulse width and PRR. Data available in the **RMA 462** record.

More information on magnetrons can be found in the article **'Magnetron Tubes'** edited by Emilio Ciardiello. See also **Very High Frequency Techniques, Chapt. 23.**