

R1001 / 3C36 - National Union UHF Power Triode



- The R1001 NU internal code is still visible on the left of the third image. Click on image to enlarge.

This quite crude R1001 prototype was made by National Union during WWII. It was registered in America in February 1946, only after the end of the war, as 3C36. Likely related to radar ancillary equipment, advanced navigation or IFF. Despite its registration, no known use was made in US. It is not even mentioned in the British CV list and there are no info about uses in the Royal Canadian Air Force. Indeed this tube is considered extremely rare, as it never came out of the experimental phase. Maybe that its design was related to advanced sets, canceled at the end of the war before it could enter into production. See also [3C27](#), [3C27B](#) and [3C37](#), all of the same manufacturer and all derived by GEC milli-micropups.

According to the datasheet, 3C36 was a power triode intended for pulse operation between 500 and 1500 MHz. Data were quite exceptional and well prove the tremendous increase of performance in vacuum tubes through the war. It was rated for 200 W plate power dissipation when fitted with forced-air cooling radiator and up to 500 W with a water-cooling jacket. At 6.3 V, 2.8 A heater, 50 A peak emission current was attainable. By comparison [527A](#) was rated for 100 A peak emission, but its filament required 5.5 V at 135 A, a power 45 times higher!

Its shape is absolutely unique, with coaxial cathode-heater connector, the large grid disc and the smaller anode top hat, terminating in the glass exhaust tip. The grid is a squirrel cage type, similar to the one of micropup tubes. Halfway between a British 'micropup' and a General Electric 'Lighthouse'. Data of 3C36 can be found in the RMA record [473](#).