CV155 – UHF Power Triode


UHF ‘milli-micropup’ power triode. Milli-micropup power triodes were introduced early in 1941 by GEC as evolution of micropup triodes, VT90 or NT99, to operate at frequencies as high as 1200 MHz. Derived from the E1190 GEC design, CV155 was tested and specified for pulse operation up to 1200 MHz. Similar to CV55, this one rated for CW operation, and to the high gain variant CV178.

Actually experimental prototypes of E.1190 design can be dated around the early 1940. Paterson in his diary writes of significant quantities already on delivery in March, so that they could be seen as production types. A 25 cm experimental radar system was running at GEC approximately by May 1940. Further developments of the system were delayed due to the successful operation of the E.1189 magnetron designed by Megaw. Much likely in the second half of 1940 the design was improved with the use of high-emission oxide-coated cathode. After few months of evaluations and of discussions, the magnetron was preferred in radar applications and the use of milli-micropups was confined to ancillary navigation or communication systems. Until the appearance of the General Electric L-14 design and of the derivative lighthouse tubes, GEC E.1189 originated the most advanced UHF power tubes.

GEC milli-micropup triodes originated very similar devices in America, where National Union introduced its 3C27, 3C27B and 3C37 types.

Rated for pulse operation, CV155 generates 40 kW pulses at 1200 MHz.

6.3 V at 2.7A heater.

CV155 spec sheet.