

CV94 / DS103 - Coaxial Vacuum Diode, T/R Switch



CV94, also known with its commercial code DS103, was designed around 1945 by Marconi Wireless Telegraph for use in its Type 960 naval high-power radar, 450 kW, 5 to 15 μ s pulses at 90 MHz. This diode was intended for use as T/R switch mounted in the antenna feeding coaxial line. It can be considered as an evolution of the [CV8](#), with about twice its cathode emission and simpler mounting.

Anode is made by heavy machined copper. The oxide-coated, indirectly heated cathode is connected to the central pin, common to one of the heater connections.

- 6.0 V at 7.5 A heater
- 14 pF anode-to-cathode capacitance at 90 MHz
- 100 A peak cathode emission at 1500 V maximum anode voltage

Spec sheet for [CV94](#).



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