

Magnetron GB unknown – Interdigital Magnetron



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This is a quite rare interdigital magnetron coming from Great Britain. No marking, but very similar to another sample owned by Giorgio Basile where some letters can still be read, CV..9.

Probably one of the prototypes manufactured by GEC during the development of either [CV79](#) or [CV89](#). Both these magnetron, even if quite similar as per shape and internal construction, differ for operating frequency. The most evident is that both the CV standardized types have B9G lock-in base, while this sample has an octal one.

The interdigital structure is based upon two series of fingers, all around the cathode and alternately connected to two opposite plates. It operates with an external line resonator connected to the two anode blocks. As the oscillation starts across the fingers connected to the line, electrons leaving the cathode are bunched in spokes rotating synchronously with the oscillation itself. The same structure was used years later in [VTMs](#), or voltage tuned magnetrons, in this case with no external resonator.