

0.5P-0.25-5 - Mictron VTM



Voltage Tunable Magnetron operating around a center frequency of 500MHz with some plus or minus 100MHz deviation. Probably about 200mW RF power to the N-type coaxial connector.

The VTM, Voltage Tuned Magnetron, covers a wide frequency range. This kind of magnetron derives from the 'Donutron' or squirrel-cage interdigital type described in Very High Frequency Techniques, Vol. 1, Mc.Graw-Hill. Its operation is quite different from that of resonant cavity types, where bunching is easily accomplished due to the high Q of the cavities. Here the anode has an interdigitated vane structure. To have electron bunching, the VTM must operate with an electron current lower than the space-charge limited one: this is accomplished using a cold cathode in addition to an injection system with a filamentary cathode.

No data.

More information on magnetrons can be found in the article ['Magnetron Tubes'](#) edited by Emilio Ciardiello.