

MICROWAVE HEATING MAGNETRON

Model 1000

The model 1000 magnetron tube has been designed to provide 1000 watts of continuous wave power at 2450 MHz into a typical food load in a microwave oven. Input power requirements are 4250 volts at 0.5 amps on the anode, and 6.3 volts at only 3.15 amps on the heater. This tube is extremely rugged and has been designed for low-cost volume production with all ceramics and metal construction. An unusual feature of the tube is its replaceable cathode assembly.



Because a microwave power source in heating applications must operate into widely varying load conditions, this tube utilizes a novel RF output structure which allows stable-operation at high VSWR levels.

The replaceable cathode assembly not only increases production yield thus reducing costs but will provide a trade-in value for out-of-warranty tube failures.

The model 1000 magnetron can be either liquid cooled or air cooled depending on specific customer needs. Air cooling fins are available that allow for either axial or transverse air flow and for a wide range of air pressures and velocities.

Various permanent and electromagnet configurations are also available. The model 1000 magnetron can be operated in any position providing the oven designer with extreme flexibility.

Careful attention has been given in the design of the tube to provide features required for domestic microwave heating applications. These features include:

- Temperature-stable, ruggedized anode structure.
- Load-stable microwave output structure.
- Low anode voltage operation.
- Rugged and economical all ceramic and metal construction.
- Long-life low temperature cathode.
- Instantaneous microwave start-up (with continuously energized 20 watt heater).
- Replaceable cathode assembly providing trade-in value.
- Low cost construction techniques.

Typical Operating Specifications:

Frequency	2450 MHz
Power	1000 watts (into 3:1 VSWR load Waveguide radiator adapts to WR430, 340, 280
Anode Voltage*	4250 Vdc
Anode Current*	0.500 Adc (Average)
Heater Voltage	6.3 Vac
Heater Current	3.15 Aac

*Nominal value when operated with rectified but unfiltered supply.



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535-4255

KLYSTRONS — — MAGNETRONS — — TRAVELING WAVE TUBES

ME 1000 PRICE LIST

Sample Quantities 1 - 10 \$365.00 each

Production Quantities

1000 - 1999	\$ 88.57 each
2000 - 2999	\$ 81.17 each
3000 - 3999	\$ 70.36 each
4000 - 4999	\$ 55.79 each
5000 - up	\$ 49.18 each

Contact the factory for prices of quantities different from those listed. Prices on cooling structures, electromagnets, and permanent magnets are also available. When requesting prices on these accessories, please state type of cooling desired including flow rates and pressure drops available.

All prices are F. O. B. our plant in Peabody, Massachusetts and are subject to change without notice.